DOCUMENT RESUME

ED 179 691 CE 020 389

AUTHOR	Liprie, Mary Lou
TITLE	Model for Implementing Competency Based Teacher Education. Final Report, Phase I.
INSTITUTION	Delaware Univ., Newark. Coll. of Home Economics.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	Jun 78
GRANT	G03-77-00-148(504)
NOTE	100p.; Not available in paper copy due to light type
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Advisory Committees; Curriculum Development; Delivery Systems; *Feasibility Studies; Higher Education; Human Relations Programs; Literature Reviews; *Models; National Surveys; Needs Assessment; *Occupational Home Economics; Performance; *Performance Based Teacher Education; *Program Development; Student Evaluation; Teaching Methods; Teaching Skills; Vocational Education

ABSTRACT

Phase 1 of a two-part project entitled Utilizing the Competency Approach for Professional Development of Home Economics Teachers developed a model for use in determining the feasibility of establishing a competency based approach in home economics teacher education at the University of Delaware. A review of the literature identified the current state of the art of competency based teacher education (CBTE): its definition, characteristics, instructional methods, and models for implementation. Thirty-two state supervisors of home economics were surveyed to learn to what extent CBTE programs were being implemented in teacher education programs. Using material from the survey and literature, a six-phase model for implementing CBTE was developed. The process involves (1) an initial awareness and acceptance project for vocational teacher educators; (2) identification of priority areas by the teacher educators; (3) assessment of the professional literature, present course offerings, local administrators, teacher educators, and advisory committee members to reestablish competencies; (4) final determination of competencies in cooperation with the advisory committee; (5) development of a delivery system and evaluation procedures; and (6) orientation and human relations programs preceding implementation. General effects of CBTE on the teacher education program and recommendations are addressed. Appendixes include the survey instrument and states and territories which were surveyed. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED179691

MODEL FOR IMPLEMENTING COMPETENCY BASED TEACHER EDUCATION

Final Report

Phase I

Project No. G03-77-00-148 (504)

MARY LOU LIPRIE
June, 1978

Home Economics Education
Department of Individual and Family Studies
College of Human Resources

University of Delaware
Newark, Delaware, 19711

CE 020 389

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

TABLE OF CONTENTS

		PAGE
TABLE OF CONTENTS		ii
LIST OF TABLES AND FIGURES		iii
PREFACE		iv
CHAPTER		
I	INTRODUCTION	1
	Rationale	
	Purpose and Objectives	
II	REVIEW OF RELATED LITERATURE	4
	Competency Based Teacher Education	
	Definition	
	Component Parts	
	Selected Models of CBTE	
III	PROCEDURE	50
IV	FINDINGS	52
	Findings of Survey	
	Model for Implementing CBTE in Delaware	
V	SUMMARY AND RECOMMENDATIONS	75
	Summary	
	Recommendations	
REFERENCES CITED		80
APPENDICES		
A	COVER LETTER - SURVEY INSTRUMENT	83
B	1. LETTER OF INVITATION TO DELAWARE VOCATIONAL TEACHER EDUCATORS	88
	2. ACENDA FOR SEMINAR	
	3. FOLLOW-UP MEMORANDUM TO DELAWARE VOCATIONAL TEACHER EDUCATORS	
C	STATES AND TERRITORIES FROM WHICH SURVEYS WERE RECEIVED	93

LIST OF TABLES AND FIGURES

TABLE		PAGE
1.	Number of Vocational Home Economics Teacher Education Programs in the U.S. by Region	54
2.	Home Economics Teacher Education Programs Implementing Some Aspect of CBTE Since September, 1973, by Region	55
3.	Evaluation of Home Economics Teacher Education Programs by Region	56
4.	Comparison of Home Economics Teacher Education Programs Which Have Implemented CBTE, Planning CBTE Programs and Those Not Involved in CBTE to Date, by Region	57
5.	Rationale for Implementation of Home Economics CBTE Programs, by Region	60
6.	Method Used to Identify Professional Education Competencies for Use in Implementing CBTE Programs, by Region	62
7.	Method Used to Identify Home Economics Content Competencies for Use in Implementing CBTE Programs, by Region	63
8.	Method Used to Acquire Instructional Materials to be Used in Implementing CBTE Programs, by Regior	64
9.	Method Used to Prepare Faculty and Students with the Concept of CBTE, by Region	66
10.	Methods Used to Acquaint Selected Groups of People with CBTE Programs, by Region	67
11.	Methods Of Providing Fiscal and Physical Support for CBTE, by Region	68
FIGURE		
1.	Model for Implementating Competency Based Teacher Education in Home Economics in Delaware.	72

PREFACE

This project was Phase I of a two part project entitled: Utilizing the Competency Approach for Professional Development of Home Economics Teachers.

Phase I was designed to develop a model for the feasibility of utilizing the competency based approach in home economics teacher education at the University of Delaware with implications for other vocational teacher education programs in the state. The activity which is the focus of this report was supported in part by an Education Professions Development Act (EPDA) Grant with the U.S. Office of Education, Department of HEW and the College of Human Resources, University of Delaware, Newark, Delaware.

Appreciation is extended to several individuals for their efforts on behalf of this project. The support of my colleagues in Home Economics Teacher Education is acknowledged: Catherine Bieber, Linda McKelvey and Hester Stewart. Support provided by Minnie Wynder, Delaware State Supervisor of Home Economics was essential. In addition the assistance of Cheryl Gruetjen, Joan Hopkins, Pat Del Dine, Sandy Palmer and Joan Simpson, is acknowledged.

Mary Lou Liprie

I

INTRODUCTION

While educational agencies at all levels continue to be a focal point for the never ending press for quality products, there continues to be new and emerging local, state and national directions and priorities to which they must address themselves. The national movement toward competency based teacher education is one concept that has arisen and experienced phenomenal growth during the past few years. In brief, CBTE

> ...is based upon the premise that higher quality educational programs can be delivered to students if the teachers are professionally prepared in as precise a manner as possible. (Resnick, 6)

Over the past decade a variety of models for competency based teacher education including eight Elementary Education Models, a project funded by the U.S. Office of Education, and the national model for competency based vocational teacher education developed by Cotrell and others, have been, or are beginning to be implemented in a variety of teacher education institutions across the nation. A wide variety of programs has emerged. On the other hand, personnel is some institutions are only beginning the process to determine if the approach is feasible for the teacher educations programs for which they are responsible. (Kay and Massanari, 1977).

State Departments of Education, too, are becoming more concerned with the literacy of individuals as many are implementing state wide policies and competency based programs to insure individuals of having basic life skills by the time of graduation from high school. Delaware is following suit of many other states with such plans as evidenced by the State Board of Education, in December 1976, adopting a resolution outlining a schedule for requiring

students to demonstrate competence in order to obtain a high school diploma. The class of 1981 will be the first to demonstrate certain competencies to graduate.

As the competency based approach to education is to be implemented in the public schools in Delaware, it is obvious that teacher educators, teachers and administrators will be affected in several ways.

A. All personnel will need an in-depth knowledge of the total concept of competency-based education.

B. Administrators and supervisors will need training in education of staff in relation to the performances which will need developed competencies.

C. Teacher educators will need to re-assess preservice and inservice programs to determine revisions necessary to implement competency based education.

As some teacher education programs in Delaware have a limited scope in identifying performances which might relfect desired competency development; and some courses at the preservice level in home economics education at the University of Delaware are based on desirable competencies, this appeared to be appropriate point in time to begin to examine the feasibility of the implementation of a competency based home economics teacher education program at the University of Delaware.

Purpose and Objectives

The purpose of this study was to develop a model to use in determining the feasibility of establishing a competency based program in home economics at the University of Delaware with implications for other vocational teacher education programs in the state. Specific objectives were:

1. Develop a plan for utilizing the competency based approach in home home economics teacher education in the College of Human Resources at the University of Delaware which could have implications for other vocational teacher education programs in the state.

2. Examine competency based teacher education programs in other states.

3. Determine the needs and interests of all vocational teacher education programs in Delaware in implementing the competency based approach in teacher education.

REVIEW OF LITERATURE

The Nature of Competency-Based Teacher Education

The concept of competency based teacher education has received an extensive amount of recognition, acceptance and support during the past decade. Its definition and effectiveness are difficult to establish as the idea is so new and as it has experienced a fairly rapid rate of growth.

The October, 1977 AACTE monograph PBTE 1977: Where to From Here?, (Kay and Massanari, 1977)indicated the following about the national status of competency based teacher education. As of 1976, a total of thirty-six states reported "involvement in one or another aspect of C/PBE." The nature of involvement has been varied, including increasing the number of areas with competency-based certification (four states), the statewide development of competency statements (three states), and the development of new policies for using C/PBTE requirements in the program approval process (six states). (p.12)

A 1977 survey of teacher education institutions that was conducted by the National Center for Educational Statistics revealed that approximately fifty percent of the nation's teacher education programs had developed and adopted written statements of learning objectives and competencies. An additional thirty-four percent of the institutions were queried either developing or awaiting approval of such a statement. Education department heads predicted that over fifty percent of the nation's schools, colleges, and departments of education would be using competencies as the basic unit of instruction by the academic year of 1978-1979. (Kay and Massanari, 1977)

Defining Competency-Based Teacher Education

In the AACTE monograph Competency-Based Education - The State of the Scene, Schmieder (1973) recorded eight acronyms used to refer to competency and/or performance based education. They are as follows:

CRTE: Criterion-Referenced Teacher Education and Certification

PBTE: Proficiency-Based Teacher Education and Certification

CBTE: Consequenced-Based Teacher Education and Certification

OOTE: Output-Oriented Teacher Education and Certification

CBTE: Competency-Based Teacher Education

PBTE: Performance Based Teacher Education

CBE: Competence-Based Education and Certification

PBE: Performance-Based Education and Certification

The American Home Economics Association's acronym is CBPE - Competency-Based Professional Education; the rationale being that as a profession, home economics prepares individuals who are educators in informal teaching situations, i.e. cooperative extension, business and community social agencies as well as for the formal classroom. (AHEA, 1974)

Then, just what is performance/competency based teacher education? In searching the literature, this writer found that performance-based teacher education and competency based teacher education appeared most frequently and were often interpreted to mean the same thing.

> Some persons prefer the CBTE term because it appears to stress the development of competencies which are the basis for both types of program. Others prefer the PBTE term because it stresses the development of the teacher's ability to actually perform the specified competencies. (Norton, p.1)

Norton (1977) further stated that some individuals in some areas of the country have a preference for one term over the other, but for all practical purposes CBTE and PBTE are synonymous.

A review of the literature on Performance/Competency-Based Teacher Education shows that the choice of a particular definition is important in determining program scope and sequence. In scope, the definition should encompass

> a common understanding and acceptance of the meaning of competency within the context of the program. The choice of definition may also affect the quality of the teachers and even, perhaps, the quality of research on teaching. (Kohlman, p. 20)

The sequence of learning experiences should allow for instructional activities, assessment, program governance and certification procedures, according to Kohlman, pointing to the need for an adequate program of teacher preparation. Such a program needs to include the development of both skills and knowledge in the particular subject area. Skills and knowledge are to be accompanied by a criteria for teacher behaviors easily observable and measureable either in an actual teaching situation and/or in a teacher preparation program. Bell and Cummings (1976) have built their definition and subsequent research on these features. They refer to the Performance-Based Teacher Education Committee of the American Association of Colleges for Teacher Education (1974), for the first essential characteristic, "a program designed to bring about learner achievement of specified competencies defined from systematic analysis of end performance desired." They also propose the following definition, as outlined by Howsam and Konston, "Competency-based education is the knowledge, skills, affective behavior, and/or judgment which the student will demonstrate at a predetermined proficiency level." (p.80) Thus, they concentrate on the actual performance to be demonstrated.

A third definition given by Dodl, pointed out that teacher competencies are, variously defined and whose major emphasis is on the teacher, in function and ability to carry out the specific program objectives. Dodl (1973) quotes Cooper and Weber and Shalock in that CBTE involves to a large extent, "...attitudes, understandings, skills, and behaviors that facilitate intellectual, social, emotional and physical growth in children and "...demonstrated ability to perform functions required in a certified teaching position." (p. 194) Producing desired results in the learners is an important function of performance on the teacher's part. Dodl (1973) also explains that the effectiveness of the traditional teacher education program for certified teachers is being questioned. The competency-based method requires a teacher to demonstrate essential proficiencies prior to certification. Ainsworth (1977) has carried this concept even further by explaining how the system actually works: "Competency-based education refers to an instructional system where students are given credit for performing to a prespecified level of competency under prespecified conditions." (p.322) This can be applied to both the teacher in the CBTE program and to the method of instruction. Thus, there is emphasis on the learner's performance as well as the teacher's. According to Ainsworth's definition, the learner knows initially what is expected of him and how he is expected to learn it. Ainsworth goes on to explain that the system is quite similar to a behavioral objective, but behaviors are organized in a sequential, hierarchal manner. The competency system is a unified whole, and is the end result of these behaviors. If the learner is able to perform a certain level of competency, he is also able to perform the sub-behaviors which contribute to this competency, and

indicates the learner's actual abilities.

Kohlman (1975) has proposed a definition quite similar to this: she sees CBTE as, "...an exhibited behavior known to promote learning, or ... a demonstrated ability to promote desirable learning or an exhibited behavior known to promote learning." (p. 20) The first part of this definition focuses on two skills needed to bring about the desired results: knowledge and performance. The latter part specified the product that should result - a demonstrated ability. The teacher must be able to perform the two (or more) skills before she can expect to see the product.

Perhaps the University of Georgia's position best sums up the development of these skills. As reported by Shearron and Johnson (1973) this view sees CBTE as,

> a teacher preparation program which precisely specifies that teachers must exhibit those competencies assumed to promote desirable pupil learning and/or demonstrate their ability to promote desirable learning among pupils.

In addition to the development and demonstration of these teaching skills, the need for continuous research and development specifically in the areas of competency validation and empirical relationships demonstration in the teaching-learning process is recognized. Shearron and Johnson (1973) add five basic assumptions to the University of Georgia's definition of teacher skills. They believe that these assumptions provide the philosophic base and give a specific direction to CBTE programs. Briefly stated, these assumptions are: that most of the competencies that teachers need can be specified and assessed; teacher education programs ought to be field centered; budget allocations should not increase significantly; the teacher education program should be a model for developing effective teaching skills; and teacher

education should become a joint venture and the responsibility of the public schools, teacher preparation institutions and the state educational agency. (p. 187)

Contrasting Views of CBTE

Many, many statements have appeared in a variety of publications on both the positive and negative aspects of CBTE programs. Among those who have challenged the value of the CBTE programs are Gillie, Hertzberg, and Brooks. Gillie (1974) observes the CBTE movement as a 3-step process: 1) defining competencies; 2) examining teachers in terms of these defined competencies; and 3) granting certification based on the successful completion of the competencies. His major argument is that CBTE will upset the status quo that has been exhibited in teacher education programs in colleges and universities across the country. Gillie believes that those defining the competencies may use this as a vehicle to assert their own values, which might not result in the most important competency derivations. He also fears politication, where outside parties i.e. state bureaus of teacher education, and certain lay groups, may try to influence and gain control in an area they know very little about. He views this as a very localized approach to curriculum development with the possibility of programs with great varieties of different competencies from university to university. Thus, examination and assessment of teacher competencies would also vary. A lack of emphasis on preparing for a professional role is another possible result of these variances which he sees. And, on the other side of the negative coin, Gillie indicates that CBTE may eventually lock teacher preparation curricula into a new system of certification mechanisms, which is really no better than the present system it is

supposed to replace. He further states that validating teacher competencies (and hence granting certification after their completion) is not possible. He cites as his reasons the fact that concepts in education, even in the practical aspects of vocational education, are constantly changing, and thus can't be nailed down to specific competencies, and he concludes that CBTE isn't a viable alternative, as long as it can't make allowances for rapid changes in the educational system. (pp. 30-31)

Hertzberg's (1976) challenge comes from three major areas. First, she says that "...conception of teaching as a series of discrete and measurable acts" is unrealistic. (p.2) She claims that this ignores the complex nature of the teaching-learning process, and that it concentrates on only a few trivial behaviors, leaving the teacher unable to be flexible and unprepared for change. Her second point is that the available research base isn't strong enough to support this concept as an appropriate and acceptable replacement for traditional programs. Her third challenge to CBTE is that it may intrude on the academic freedom of some states where it is proposed or mandated as the only route to initial certification or recertification of teachers. She concludes that holding the teacher accountable is "...unrealistic, unjust, and counter-productive." (p.3)

Harris and Finch (1976) reported Brooks defined criticisms of CBE (Competency-Based Education) programs in general, which also could apply specifically to CBTE programs:

1. The "sum of parts" does not always equal the whole, and thus, the mere fact that students are able to demonstrate competence in isolation does not guarantee success in the classroom.

2. Because the competency-based program has as one of its foundations a systematic approach, it is mechanistic and dehumanizing.

3. A competency-based program claims individualization, and yet each student is expected to display the same competencies; this claim does not seem consistent.

4. Trivial behaviors are those most easily operationalized; the really important aspects of teacher education may be overlooked.

5. We really know so little about how children (or teachers) learn that it seems ridiculous to base a program on competencies that may not be the appropriate ones.

6. The really important areas of teaching are in the affective domain, and these are very difficult to categorize and measure. (pp. 6, 7)

In contrast to these criticisms, Lindsey (1973) is one of many who view CBTE as a very practical movement. She states that competencies are based on our valued abilities. In other words, they are deemed desirable characteristics to be included in teacher preparation programs. She states that these competencies should match the teacher's role, and should be designed to prepare the teacher as a professional through classroom and non-classroom performance. She describes how this is to be done in a 4-step sequential manner: 1) specifying in advance expected outcomes in terms of the competencies to be demonstrated at a successful completion of the program; 2) development of learning opportunities and environments expected to facilitate the student's progress toward specified outcomes; 3) construction and use of evaluative procedures and instruments which are directly relevant to the competencies stated; and 4) the resulting system will possess feedback channels which will be the evidence for the function and effectiveness of the CBTE system. (pp. 181-182)

The current AACTE-PBTE Committee accordingly stated:

> ... there is a great deal of support for the view that the C/PBTE concept's potential is still seen as viable and that many CBTE, CBTE-like, and CBTE-related activities are continuing to be and even increasingly being engaged in. (Kay and Massanari, p.12)

Components of Competency Based Teacher Education

An attempt will be made to identify the component parts of CBTE. An examination of each component in depth and mention of some additional contributing factors is made. By clarifying these parts, the importance and place of each relative to the other will be evident.

In 1970, the AACTE established a PBTE committee and commissioned several papers on the subject of P/CBTE. From these papers five characteristics or components of CBTE were established along with several related, and/or desirable qualities that distinguish the competency based teacher education program from other teacher education programs. Elam (1971) reported these as follows:

1. Competencies to be demonstrated by the student are:
   a) derived from explicit conceptions of teacher roles
   b) stated so as to make possible assessment of a student's behavior in relation to specific competencies; and
   c) made public in advance

2. Criteria to be employed in assessing competencies are:
   a) based upon, and in harmony with, specified competencies;
   b) explicit in stating expected levels of mastery under specified conditions; and
   c) made public in advance.

3. Assessment of the student's competency:
   a) uses his performance as the primary source of evidence
   b) takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior; and
   c) strives for objectivity.

4. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completion.

5. The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified.

In addition, several components are considered desirable qualities of a CBTE program. They include:

1. instruction is individualized and personalized
2. the learning experience of an individual is guided by feedback
3. the program is systematic
4. the emphasis if on exit, rather than on entrance requirements
5. instruction is modularized; and
6. the student is held accountable for performance

Competencies

The first major component is the development of competencies in a teacher education program. This includes the broad category of curriculum development. Bruce and Carpente , Lindsey, and Ainsworth have identified certain features as being essential to the development of curriculum for teacher education programs. They include both precision and flexibility, in that the specific competencies to be attained are clearly spelled out, but there are a variety of ways in which to reach them. Thus the curriculum encompasses a number of variables which can be manipulated according to the needs of the program and the learners. Coupled with an independent time frame, this allows for the pre- or in-service teacher to plan individually how she will accomplish these competencies. Ainsworth (1977) believes that this type of curriculum, which is not based entirely on coursework, eliminates the type of lockstep system of which the traditional education system has been accused.

Lindsey (1973) has identified 3 major steps, which appear to give a basis for curriculum development. They are: 1) identification of competencies, 2) designing instruction, and 3) evaluating program.

Competencies go hand-in-hand with curriculum development for CBTE. The two cannot be separated, for competencies are the bulk of these teacher preparation programs. As with the varied definitions for CBTE, there are many different viewpoints in regard to what competencies actually are.

How are competencies developed? They are usually derived from a combination of sources, including the demands of the specific school curricula and goals, available research, and analyses and concepts in regards to teaching functions. Kohlman, Blankenship and Vickers, and Dodl share these common features in their concept of what competencies entail and how they originate:

> Competency statements are behavioral statements that serve as a guide to the selection of criteria, thus facilitating the assessment of student behavior. Competency statements should include a wide range of behaviors--cognitive, psychomotor, and affective (especially as associated with the cognitive and psycho-motor domains). (Kohlman, pp. 20-21)

Blankenship and Vickers (1974) add the following in regard to what competency statements are supposed to do:

> ...delineate the knowledge and skills required for initial certification. These competencies are stated in terms of observable behavior, precise conditions and standards are omitted. Each institution must operationalize these competencies for its own program. (p.50)

and from Dodl (1973):

> Depending upon basic assumptions about teaching and learning as well as practical considerations pertinent to the intended roles for which a program is designed, competencies are derived to constitute those behaviors implied by the particular functions essential to the intended teacher role. (p. 195)

Thus, they view competencies as being derived from a desirable end of teaching behaviors. These behaviors need to be broken down from a systematic analysis of the entire teacher education curriculum. Once this analysis has shown the specific areas in which competency through performance can be

achieved, the competency statement can be formulated. Competencies, then, are the means to the end. They both designate the observable, desirable end behaviors of teaching and they give the specific progression of activities to reach this end. The way in which competencies reach this goal is all-inclusive and two-fold. First, they form the basis for the initial criteria and the final assessment of the teacher's behavior and/or performance. And second, they take all areas into account in the development of a competent teacher, in the selection of the cognitive, psychomotor, and affective domains of the educational process.

Competency statements specify exactly what the learner can do. They clearly spell out the conditions under which he is to exhibit this behavior and the criteria which will be used for evaluation of his work. Shearron and Johnson (1973) believe that this can be accomplished in three different ways. The first is to examine what pupils should be able to do and learn; from this, infer what the teacher should be doing and learning to facilitate this process. The second involves taking existing coursework and translating it into specific competencies. The third is to have a panel of teachers, teacher educators, state directors of public instruction, students, and other significant persons decide what are essential competencies, and they develop a program to include the competencies they designate. (p. 187) It appears that most competency-based teacher education programs are a combination of all three of these methods, with more emphasis on the first and third ones than the second. Usually, competency-based programs require development of new, unique activities, which are difficult to derive from existing ones.

Shearron and Johnson (1973) also propose that there are two types of

competencies in addition to the three methods for their development. They are generic and enabling competencies. The first type, the generic competency, is applicable to all teachers. Generic competencies are observable, and are stated in behavioral terms. This simplifies the observation process in determining competence. Generic competencies focus on the development of teacher personality and the actual skills to be demonstrated. Appropriate teacher personality means that the teacher's attitudes and behavior will enhance her relationship with her students and will be reflected back in their willingness to learn and their responsiveness to her.

The second type is the enabling competency. This includes the teacher's utilization of specific techniques and her knowledge of the specific subject area. In addition, she should be able to determine the instructional needs of her pupils, and to plan learning activities for both individual students and small groups. The outcome of enabling competencies are usually measured in observable performance and objective assessment tools.

Enabling competencies also emphasize the teacher's knowledge and utilization of subject matter. In this way, they are related to generic competencies. However, enabling competencies go one step further in looking at the students to see how successfully the teacher has performed her role. In reality, her competence is reflected in the behavior of her students. Thus, enabling competencies provide students and teacher with specific goals and with the criteria to evaluate these goals. Assessment of these competencies is made in situations with peers and pupils as the teacher is expected to demonstrate these skills. She should have knowledge of both the competency and the ability to demonstrate it. (p. 187)

Generally, a teacher will be expected to demonstrate competence in most or all of the specified competencies. She has some flexibility in choosing the particular learning style she wants to employ. She is able, in a sense, to adjust achievement of both the generic and enabling competencies to her individual personality, limitations, and abilities. This results in a more personalized approach to learning in the teacher education program.

From the standpoint of competencies, it can be seen that

> A competency is knowledge, skills and judgment which the student will demonstrate at a predetermined proficiency level before initial and/or continuing certification. (Cook and Richey, p. 1)

How then, does the preservice teacher arrive at these competencies as demonstrated in such knowledge and skills? A competency-based teacher education program allows for flexibility, as mentioned earlier. Such flexibility means that a variety of instructional methods and materials must be available to the preservice teacher, and it is up to her to select which of these methods and materials will be most effective as she works toward a competency. It also means that she should be able to work individually, in a small group, or a large group setting involving the entire class.

Instructional Methods

Instructional materials and methods are the hub of the CBTE program, for they hold most of the skills, knowledge, experiences, behaviors, and subsequent competencies in an orderly fashion around themselves. In order for them to be effective, they must be derived with these competencies in mind, just as competencies are derived with desired end behaviors in mind. Bruce and Carpenter (1977) have shown how the University of Kentucky has developed such a program and has taken many variables into account in the

development of instructional materials. They point to 9 major steps, which show how competencies form the basis for these materials. These steps are as follows:

1. Identifying priority occupational areas
2. Conducting occupational analyses
3. Developing performance objectives, criterion-referenced measures, and performance guides
4. Conducting field review and revising objectives, criterion-referenced measures and performance guides
5. Preparing instructional materials
6. Testing and revising instructional materials
7. Demonstrating individualized instruction systems
8. Implementing the competency-based program statewide
9. Providing for professional preparation (p. 58)

Objectives

One of the most, if not the most important component of most instructional materials for CBTE is the designation of specific objectives. Objectives for these materials are sequentially derived from competencies. They share basic characteristics with competencies such as specifying exactly what the learner can do and the conditions under which this behavior (skills or knowledge) will be exhibited. In addition, objectives specify the criteria for evaluation of these skills and behavior. These three criteria help to give the teacher an idea of what is expected of her, and it is specific in informing significant others of that teacher's particular abilities.

Objectives, like competencies, are usually stated in performance terms but include the necessary content to be attained. They emphasize the active role of the learner in this case the preservice teacher, in the learning process. They may or may not include the actual learning methods to be employed. This allows for more flexibility in variables of student characteristics, faculty expertise, and available facilities. (Cook and Richey)

Tyler (1976) has summed up three characteristics of behavioral objectives. He believes they should:

a. stress those things that are important for students to learn in order to participate constructively in contemporary society;

b. be sound in terms of the subject matter involved; and

c. be in accord with the educational philosophy of the institution. Objectives should also be of interest or meaningful to the prospective learners (in this case, preservice teachers), or they should be capable of being made so in the process of instruction.(p. 63)

In a broader sense, Kohlman (1975) adds that behavioral objectives are:

> ...stated at the instructional level and related to the same identified competencies. The learning opportunities may be individualized or combined with other approaches to learning. Evaluation at this phase should provide continuous feedback--a means of noting progress to the specific behavioral objectives, whether they are within a module or part of a lesson. (p. 21)

To summarize behavioral objectives: first, they are fragments, which when completed, form a complete competency; and secondly, they give the bare framework for creative methods in pursuit of this competency. Relevancy is often attained through creativity and flexibility, and they may also stimulate the teacher to further independent study and a deeper interest in other objectives.

Modules and Individualized Instruction

Kohlman (1975) has mentioned two very significant aspects of instructional media for CBTE -- individualized instruction and learning modules. Modules are learning units. And as learning is as varied as the individual student, there are many ways to approach modules. Since a discussion of each type of module and its component parts could become quite lengthy, we shall briefly mention a few of these and then discuss one in detail, as it

seems to summarize the main feature of many CBTE modules. Among others, Klingstedt (1972) is one who has suggested that modules be included in the CBTE curriculum. He mentions several important points about modules in addition to mentioning the major parts that they should include. Modules are a planned series of learning outcomes, and learners should know both what is expected of them and what they will be able to do after completing the module. Modules should be addressed towards competencies in the areas of knowledge and skills in a particular content area or related to a smaller part of that area. Modules both include, but go one step beyond, performance objectives, and they allow maximum flexibility in both learning and instructional styles.

Klingstedt (1972) suggests a learning module that contains six basic features, some of which are common to other modules as well. These features are summarized as follows:

1) Objectives, which give the learner an idea of what is expected of him and which should be stated in performance terms whenever possible; 2) Pretest, which can be used to help both the teacher and learner decide whether it is necessary for her to go through the actual module. 3) Rationale, which tells the learner in what ways completion of this particular module will be beneficial to her both in present and future pursuits. It establishes the value of the particular module, and in doing so, goes beyond the preliminary learning objectives; 4) Learning Alternatives, activities that are designed to help the learner accomplish the objectives, and suggest a variety of means to reach these ends: Klingstedt (1972) believes that modules should offer at least 2 options in this category; 5) a Posttest, to measure whether the learner has actually attained the learning objectives, or whether he needs to

recycle through any part of the module. 6) Resources, a listing of materials and media, plus necessary forms to be completed during the course of the module. (pp. 29-31) Bell and Cummings (1976) would add to this a flow chart for the module, a diagram if you will, to show the step-by-step progression that the learner follows in completing the module (this could be included in the rationale section), and alternative enabling activities to aid in remediation or recycling (possibly to be included following the post-test) to allow the learner more opportunities to complete a module. (p.81)

According to the Center for Vocational Education at the Ohio State University, (Hamilton and Quinn, 1975) learning modules contain a set of activities which are intended to assist the teacher in her development of teaching competencies. These are usually specified by terminal objectives. Some modules can be completed quickly, as they encompass finite teaching competencies, while others are broader in scope, thus requiring more time for completion. Thus, the size, scope, and content of each module may vary (depending on its setting and terminal objective), but most have the following four features: (1) Title Page; (2) Introduction; (3) Module Structure and Use; and (4) Learning Experiences. The title page may list the module title, module category and number (if it has one), and the number(s) of which performance elements are covered in this particular module. It may also contain the prerequisites for the modules if there are any. These prerequisites serve as guidelines and are themselves flexible. They merely indicate at what level the teacher should be working when doing the module. The second part, the introduction, explains exactly what competency the module covers, and tells the importance of acquisition for the teacher. Its main purpose is to motivate the teacher in pursuit of such a goal.

The last two aspects focus on the actual content of the module. The third section, module structure and use, explains the organization of the module. It also outlines objectives, both terminal and enabling. The terminal objective is the all-inclusive competency which the teacher will be expected to perform, and enabling objectives are a structural breakdown of smaller objectives which combine to form this larger one. Here again is evidence of the importance of objectives in CBTE instructional materials. This section also contains the actual procedure for completing the module, including those the teacher must do, and those she may opt to do. In addition, a resource section lists the references and resources the teacher will need to complete the learning module. A section containing pertinent terminology may also comprise part of this third section.

Finally, the fourth section gives the actual activities (learning experiences) the teacher will be doing in order to complete the module. A preliminary overview helps the teacher to decide whether or not she actually needs to go through the learning experience. Following the overview, step-by-step directions help to lead her to the learning activities she must perform. This usually will involve a wide variety of activities, such as reading, observing an experienced teacher, viewing a filmstrip or other media, small group discussions, role playing, case studies, writing an analysis, summary or critique, writing other materials, operating equipment, and the list could go on. Special sheets, check lists, and forms are included with appropriate activities. Optional or supplemental activities may also be provided for the teacher who needs or wants additional practice and/or training in certain skills. Feedback devices, included in each module, indicate to the teacher how successful she has been in completing these

activities. A final experience of a module may be for the teacher to actually demonstrate the competency in a real or simulated school setting.

Modules, then, are one systematic approach to the complex task of developing teacher competencies. Their very nature characterizes them as being self-contained, since they are so complete in their inclusion of learning activities, experiences, feedback, and opportunities for practicing skills. In addition, a module forms a rationally-constructed framework for such learning and skill development, and it builds on this framework as it progresses through each stage. The flexible nature of the module enables its content to be updated, learning experiences enriched, and its methods modified to meet the needs of preservice teachers. Its basic design allows it to reach these teachers real needs, motivations and abilities, and in this manner becomes somewhat individualized. Its main goal is making successful completion a reality. According to Bruce and Carpenter (1977):

> Each module is a set of learning activities designed to help the student acquire and demonstrate a particular occupational competency. Organizing the instructional program in modular form increases the possibilities for student self-pacing and individualization. It also aims the instruction toward specific competencies and ensures relatively objective evaluation of successful performance.
>
> Each module encompasses the learning of a single identified objective or a small group of related objectives that can be learned effectively in combination. All of the activities outlined in the module are directed toward achievement of the stated objective or objectives, and progress toward subsequent objectives hinges on the student's demonstration of that achievement. (p.59)

Individualized Instruction

Individualized instruction has been noted several times in reference to learning modules. One of the major purposes of the learning module as outlined by Klingstedt, (1972) is to provide the basis and the vehicle for

individualized instruction,

> ...so that the learner is able to identify the objectives, progress at his own rate in his own learning style, identify his strengths and weaknesses and recycle when objectives have not been achieved. (p.30)

One of the major purposes of individualized instruction is to provide the learning module with flexibility which can be transferred to student learning styles.

> ...Modules ensure the careful handling of individual differences. Students progress at their own rate and desired degree of success or rating. Experience or learning acquired beforehand allows students to test successfully through tasks and modules and move through the curriculum more quickly. (Dupuis and Bell p. 36)

Individualized instruction is also important to the modular approach in other areas. The AACTE literature has identified desirable characteristics of PBTE programs. Among these are three elements which involve the use of individualized instruction:

1) Instruction is individualized and personalized.
2) The learning experience is guided by feedback
and 3) The program as a whole is systematic
(Hamilton and Quinn p.6)

The application of the first element to individualized instruction is obvious; the reasons for individualization and personalization (flexibility, allowing for individual differences and learning styles) have been covered.

An observation of the second element, shows feedback on performance also desirable; it provides the learner with an idea of what competencies (both knowledge and skills) she has acquired thus far; and it also indicates to her those areas in which she can improve. Feedback can be accomplished through many channels in modular and individualized instruction: through the pre and post tests, comments from the instructor and from other learners, and through

the actual learning experiences, as indicated previously. Demonstration of skills and a feeling of confidence in her actual abilities are additional ways in which the learner herself may know the degree to which she has been successful in these tasks.

The third element, a systematic approach to learning, is most possibly the basis for the individualized instruction approach. It is usually evident in the component parts of the learning modules and it is even more essential if the module is to be given to students for their own use. Sequencing learning in a systematic fashion has one major advantage for the instructor and two for the learner. Using individualized instruction as a teaching strategy, the instructor is able to maximize the time spent with each student in instruction. In this capacity, he acts as a facilitator and a resource person, rather than an actual dispenser of knowledge. Furthermore, he has the opportunity to address himself to a greater degree to individual learner needs, concerns and deficiencies. As far as the learner is concerned, both advantages are related to the organization of instruction that is individualized. The first is that the learner is able to break down material to be learned into its component parts. From this, he can choose the amount of time he will use and the direction he will take to complete the unit. And the second advantage comes from having the complete unit in front of him. Again, seeing component parts, and understanding where and how each part fits into the complete unit, he hopefully would see the logical progression that is involved, and this would help him to clerify the learning process in his own mind. Having a clear idea of the task, and a visible "roadmap," he should be better equipped to succeed.

Finally, there are other factors which contribute to CBTE through the

individualized instruction approach. Dodl (1973) believes that the derivation of a specific procedure will determine the basis for designing and operating teacher education programs, and that this procedure will be used to convey the specific goals and competencies of a curriculum. Individualized instruction is but one of many teaching techniques, but it seemingly could be used in combination with group-based work; with lightly structured (through the modular unit) and/or student centered learning; and with autonomous instructors and/or instructors who work as a resource team. It can also be adapted or programmed for use with computer-assisted learning to add yet another dimension to the learner's exposure and learning experiences. (Dupuis and Bell, 1974)

Individualized instruction contains many of the features which are desirable for CBTE. The degree to which it is organized, developed, and fitted to individual learner needs, abilities, and limitations, as well as its ability to select and convey the specific competencies to be acquired, will greatly influence its success as part of the total CBTE curriculum.

Student Groupings

A third instructional method (which is not unique to CBTE) is the various groupings of students that are possible. The variety of competencies to be demonstrated by students (i.e., pre-and-in-service teachers) necessitate flexibility in classroom organization. Students should be free to work on an individual basis in small groups (pairs, peer tutoring or discussion), and also should have opportunities to work with and in front of, the large group. And, of course, the responsibility for this does not rest completely on the student. The teacher educator should be aware of the needs of the group and of individual students. She should allow sufficient time and resources for

this instruction to be accomplished.

Field Experience

Another method of importance is that of field experience. Students do not learn in isolation in the classroom. They need ample opportunities to test and to demonstrate their skills and knowledge. Part of this can be accomplished through student teaching, but in a competency-based program, part should be done through other experiences as well. The main proponent of this is Tyler (1976), who sees the importance of having a variety of experiences to accomplish objectives and competencies, and to achieve transfer-of-learning and training. He believes that well-designed field experiences will enable students to use competencies within their present abilities to accomplish the task at hand, and also they will see what they are expected to learn (p. 63). Such experiences would provide a meaningful basis for the competencies to be mastered, as well as encouraging students to develop supplemental competency and to refine or expand the ones they already have mastered.

Other implications of this transfer of training are that the training institution assumes responsibility for helping students to acquire behaviors which are important for these experiences; to be sure that information conveyed to the students is both relevant personally and applicable to the present situations they will face; and specific ways to implement these skills and knowledge outside the university classroom should be discussed.

Although Tyler's (1976) major concern in field experiences has been for the child in the public school system, ways in which these field experiences are important and applicable to the pre- and in-service teacher as well. Tyler's main point is that the educational institution, be it public school or university, should recognize the contributions that social experiences, home, places of business, media, the community, and other facets of society can make to the

total education and application of learning. (p. 65) Students should be given opportunities to experience these situations, and it is possible that competencies could be developed which directly relate to skills in these particular areas.

Other Components

A final component part of CBTE to be considered here is not included in the actual framework of curriculum but influences its design and implementation to a great extent. Rather, it is an overall approach which focuses on three major concerns. These concerns are: 1) validation; and 2) certification of teachers through CBTE; and 3) "political" pressures from institutions that deal with teachers and that are closely related to the first two concerns.

Validation deals mainly with the learner's ability to perform according to a specific competency. The instructor is not responsible for changing learner behavior in this sense, as much as attainment of the competency changes it. If the learner can exhibit competence in a certain area, then the competency is said to be valid. In the future, validation studies may be required to show the extent to which competencies are attained at specific levels of mastery. Competencies which are valid, and which bring about the desired changes in learner behavior, should be integrated with the CBTE program. (Kohlman, 1975)

Certification of teachers is often a debatable issue, no matter what particular method of instruction is used. Even more controversy seems to gather around CBTE because of the nature of its design. In some CBTE programs, the learner will receive a statement of the competencies he has mastered upon completion of a course of study. There may be no mention made of the competencies not attained, nor will there be a definite indication of his standing relative to other learners. A letter grade may or may not be given. (Ainsworth, 1977) Aside from these factors, there are also problems in maintaining standards at

an acceptable level, which corresponds to the standard that the teacher is expected to perform. (Ainsworth, 1977, Lindsey, 1973) This means that those who implement CBTE must specify which competencies all learners must attain and demonstrate. This is necessary to give some continuity to the program. They must also decide at this point what they will do when a learner demonstrated competence without going through a learning module or other type of learning activity--test out and go on to a new activity, or work through the activity any way in order to enrich her background? Teacher educators must come to a con-census on how the learner and the instructor's time and talents would be best used. Next, they must be able to agree on secondary or supplemental competencies which learners must master. How many of these and to what level of competence should these be mastered to the same degree as the "essential" competencies, or will they be more flexible, since these are supplemental? Is the learner free to choose any combination, or must he choose a certain mixture of competency units?

Grading of competencies is another consideration. Will essential and supplemental competencies be given a letter grade, or will only the essential competencies be graded? Will they be graded at all? What will the standards be in regard to a "passing" grade? And how will competencies be listed on a learner's coursework listing?

Finally, who will decide how certification is to be granted. Is there to be a university-based or state-wide procedure for institutions which use the competency-based program? Who decides how this is to be done, and how is this type of certification conveyed to other school systems? Does certification in a competency-based program mean that a teacher has different qualifications from a teacher from a "traditional" teacher preparation program? All of these are important questions of real issues that need to be faced.

This final consideration, namely, who decides how certification will be granted, leads into the third major concern. Pressure from different individuals and organizations as to what they'd like to see is a debatable area among teachers and teacher educators, and it is definitely a political issue. The debate comes from who should have a say in the design, validation, and implementation of CBTE, and how certification will be granted. Some proponents of CBTE believe that input should come from any or all of the following: pre- and in-service teachers, teacher educators, school administration, pupils, universities, state boards of education, and even representatives from the community (Hertzberg, 1976; Blankenship and Vickers, 1974; Shearron and Johnson, 1973 and Bruce and Carpenter, 1977); while others seem to believe that it may be more successful to have a certain select group make the final decisions. These certain select few usually include the teacher educators, pre- and in-service teachers, and sometimes the state boards of education. (Lindsey, 1977; and Dodl, 1973) These persons seem to believe that often those who are directly involved with CBTE should be the ones to choose the type of approach and number of competencies to be mastered. While they recognize that input from others may be helpful, their main reservations center around the fact that some power and authority may be transferred from the hands of those who are best qualified to deal with it, to the hands of others who are not as well-qualified. Dodl (1973) sees as a potential danger that setting competencies and performance standards may eventually pass from educators to agencies and representatives who are responsible for spending educational monies, and those most affected may have no say in the matter. There is no easy solution to this concern, nor is there one to the questions of validation and certification. It is the responsibility of those who are directly involved at this stage to set precedents and to establish criteria for the resolution of these concerns.

Assessment and Evaluation

The third component of CBTE is that of assessment. Assessment and evaluation are usually synonomous, and they will be used here as such. The reference to the importance of evaluation in designing objectives for competency-based teacher education has been established indicating that they should be written with assessment in mind, and should include measures to evaluate both knowledge and skills objectively. Sometimes the two can be evaluated simultaneously:

> Performance provides the primary source of evidence that a participant has achieved a competency. Whoever assesses the performance must look for evidence that the participant has acquired knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behaviors. (Kohlman, p. 22)

In addition, assessment is <u>not</u> a one-time effort which comes at the end of a learning unit or module. It is continuous, occurring throughout the program, and provides useful feedback to guide future learnings. Again, the foundation for this is the behavioral objectives, which are,

> ...stated at the instructional level and related to the same identified competencies. The learning opportunities may be individualized or combined with other approaches to learning. Evaluation at this phase should provide continuous feedback--a means of noting progress to the specific behavioral objectives, whether they are within a module or part of a lesson. (Kohlman, p. 21)

It appears that there is no "universal" way to design objectives for assessment, other than that they consciously provide for ways in which to do this. One way is through the development of criteria for each objective. Criteria set up a standard, against which a learner's behavior can be judged. According to Kohlman's model, criteria <u>must</u> accompany each competency statement, and are to include: 1) an expected level of mastery; 2) specific conditions under which the competency is to be demonstrated; 3) definitive dimensions against which behaviors can be evaluated; and a knowledge and/or performance component, depending on what

is being demonstrated. In addition to these, she states that it is imperative that the learner be notified of these criteria and measures, in advance of instruction, so that she knows what exactly is expected of her before she begins. (Kohlman, p. 21)

According to Lindsey, (1973) specifying in advance what the expected outcomes in terms of competencies to be demonstrated, is another way to incorporate assessment at the onset of the program. From this, competencies are developed to facilitate the learner's progress toward these specified outcomes; and this makes the construction and use of procedures and instruments for evaluation more directly related to the competencies.

Hughes and Fanslow (1975) are among those who have done work in the area of evaluation for CBTE programs. They define four essential characteristics which should be taken into account, along with the devices through which to implement these characteristics. The devices are achievement tests (which test the knowledge acquired as a result of the competency), and observational devices (which focus on the skills that have been developed). The four characteristics are defined as: 1) content validity; 2) objectivity; 3) reliability; and 4) usability.

Content validity refers to "...the degree to which the evaluative device actually assesses the competency." (p. 24) It takes into account the importance of each competency in relation to the unit as a whole, as well as the importance of each item in regards to a specific competency.

Objectivity "...is the degree to which a scorer is able to rate participants solely on the basis of their performance without reference to the scorer's personal or subjective opinions." (p. 24) It is relatively simple to design objectivity into achievement-type testing, but observational devices and essay exams must be carefully outlined in terms of expected learner behavior in order for them to be characterized as objective.

Reliability "...means that scores tend to repeat themselves and will produce consistent results." (p.25) This would mean that scores on CBTE tests should tend to repeat themselves fairly consistently over time. Competency-Based Teacher Education implies that the competency level to be attained would fall into a fairly narrow range of scores. Especially in achievement tests, but in the other two types as well, learners are working toward a pre-determined level of competence and

> ...the reliability level is likely to be near zero because the reliability coefficient is based upon the variance (spread) of scores, and a CBE program focuses on a narrowing of the spread. (p.25)

On achievement-type tests, this would usually be calculated from the actual scores; and on observation/essay tests, agreement among a majority of observers and/or scorers indicate reliability.

Usability is the final characteristic of evaluation.

> It represents a variety of considerations related to the practicality of the device and includes such concerns as the conditions necessary for data collection, types of individuals for which the device is suitable, the availability of data or reliability and content validity and time and money costs associated with the data collection devices. (p.25)

This is an important consideration when time and money are limited, as well as other non-human, plus any human, resources that also are in limited supply. Practicality is an important feature that works in combination with the abundance or lack of these resources. The practicality of a device will determine its frequency of use and hence will also influence its reliability, validity, and feasibility.

In summary of these four features, Hughes and Fanslow propose four questions that should be considered when planning evaluation devices for a

CBTE program:

1) What evidence is available to substantiate that the measurement devices have content validity?

2) What reliability data are available? Are reliability coefficients sufficiently high?

3) Is the scoring procedure such that scores awarded to individuals are objectively derived?

4) Are the devices unsable for the designated individuals and possible (or practical) given the time and money resources available for the assessment? (p.25)

In order for evaluation to be carefully guided and planned in behavioral objectives, the answers to each of these questions should be "yes." If any or all of the answers are "no", then the devices (and perhaps the objectives and/or competencies) should be carefully re-evaluated to try to control for accurate evaluation of learner competence:

> An assessment of competency can be crucial to the participant. An assessment can decide whether a student passes or fails a course, whether or not an applicant for teacher certification is certified, and whether or not a teacher or other educator receives a salary increment. (p. 23)

Thus we see that precise evaluation touches many areas, all of which are crucial to the professional development and growth of a teacher.

Accountability is the final topic to be considered here. It has been mentioned in regards to a definition of CBTE. It is also an essential feature, though not a component part, of the CBTE program. By defining objectives and competencies; by "structuring" learning to some extent through modules, individualized instruction, and other instructional techniques; and through careful planning for evaluation, the expected results are readily measureable. Accountability implies that the particular unit will accomplish what it says it will, and that the outcomes of learning can be tested in a specific way to see

whether this has been done. It also implies that the student will be able to demonstrate her skills, not merely recall information. (Dodl, 1973) If the steps outlined above are followed, the accountability that is called for from most CBTE programs could become an integral part without having to be carefully controlled or specified. This is not to say that accountability will decrease in importance; on the contrary, it could possibl· increase in its prevalence and its use.

Models for Competency-Based Teacher Education Programs

General Model

Among any combination of features, a general model for Competency-Based Teacher Education should contain the elements to be outlined below. Reasons are also given to serve as general guidelines and may be somewhat flexible, depending on the specific model. Kohlman (1975) has identified five steps to be used in developing a model for Competency-Based Teacher Education. They shall be used as a starting point, for they focus on the major ideas and concepts of CBTE. To this will be added another element, one which could be considered supplementary, rather than essential to the CBTE curriculum. These two elements are drawn out in order to give some indication as to their importance in a CBTE program.

The first step Kohlman, (1975) has suggested is identifying tentative competencies; the second is to develop an assessment system; preparing instructional material is the third step; the fourth step in developing a model for CBTE is establishing a management system to monitor the flow of students through the program. This is related to the decision about when the required level of competence has been demonstrated and how the learner will then exit from the program. This also takes into account the facotrs of validation, granting of

certification, and other decisions about grades, credits, and listing of competencies.

Kohlman's fifth and final step is establishing plans for the management, design, and funding of the major research effort that is necessary.

Human Relations Program

To these five steps, this writer would propose a sixth. Unlike the others, it does not have a specific sequential "place" in the development of CBTE programs. Rather, it should be started when competencies are formed and should continue through the final end evaluation. That step is to plan for the implementation of a *human relations program* simultaneously with the CBTE curriculum. Shearron and Johnson (1973) have made some valuable suggestions in this area. When the competencies are formed and learning experiences are provided, they believe that activities should be included which enable prospective teachers to relate well to others. They state that it is important to train prospective teachers to be high level facilitators in the learning environment. This involves the teacher's ability to be sensitive to communication; both hers and others. And in order to do this, exercises are provided which allow her to express her feelings to others and likewise to hear their ideas. Thus the exercises work in two ways: 1) to develop skill in the teachers; and 2) to enable them to express their feelings to each other. Training is in a small group session, since neither learners can learn this skill through independent study, nor would a large group provide the sufficient opportunities for developing these skills. After the need and the opportunity for the development of some level of skill or competence in this area has been established the next step is to pre-assess the learners on two indexes. One is a discriminative index, and one, a communicative index, in order to determine the learner's present level of helpfulness. This level

would be indicative of the prospective teacher's ability to communicate with her students, an important competency for successful teaching.

The way in which these training sessions motivate the learners towards this goal is to teach each member of the small group to recognize various levels of discrimination and communication from others. Apart from the group, pairs practice with specific exercises, and then they return to the larger group periodically to share their experiences and to receive further training. (p. 191)

Concerning the actual experience that the prospective teachers acquire, this is highly dependent on their individual reactions to the program. Given the opportunity to explore and express her own feelings, values, and attitudes; to understand why she feels as she does; and to be able to recognize same or similar feelings, values, and attitudes in others, is the major focus and goal of the human relations program. No specific competencies are defined at the onset in order to give each teacher the freedom to explore and express these ideas in her own way. Guidance from trained instructors is necessary to facilitate the successful exploration of these ideas, and subsequently, to develop the skills and competencies that are the result of such exploration. Let us hasten to say that part of the instructor's task is to help the teachers to express her fears and problems, if any, with competencies, learning materials, and/or experiences expected of her in other areas of the program. The instructor should be sensitive to her, and should encourage her to examine the basis of these fears. If possible, a plan should be made for resolving these problems. In addition, the instructor should relay these suggestions and comments, as these may be helpful in designing and implementing future CBTE programs.

The skills and competencies that evolve as a result of human relations training could be transferred, along with other competencies, to simulated or real school situations. Experience in such situations would allow the propsective teacher to gain confidence as she is able to futher develop and refine these skills.

In addition to these five major steps and the sixth additional feature, it would he helpful to consider the following element, *The Advisory Committee*. It may not be appropriate to every CBTE program, but its value in planning and implementing curriculum should be carefully considered before it is discarded altogether.

Among others, Dupuis and Bell (1974) have suggested the formation of an advisory council to assist in curriculum development, objectives, learning experiences, and even field experience for propspective teachers. (Although their research is based on a secondary school vocational education program, it is believed that their suggestions can be helpful at the collegiate level as well). They state that the advisory council should be composed of experienced persons in the trade or occupations that students would be entering. If this concept was extrapolated to the prospective teacher in a CBTE program, this would most likely include teachers and teacher educators in the field. The political ramifications of including such persons have already been pointed out. However, it seems reasonable to assume that they could have a valuable role in the "...enumeration and specific development of competencies necessary for at least initial entry into the marketplace" (Dupuis and Bell, p. 35).

Specific Models

Data cited earlier in this study indicated that there appears to be a commitment for CBTE from many states and teacher education institutions across

the country. Several forms of "activity" and "commitment" with which specific institutions have been involved will be cited to show the wide-ranging and pervasive nature of this movement.

Model Curricula For Vocational and Technical Teacher Education

1967 marked the beginning of the initial research on PBTE by the Center for Vocational Education at The Ohio State University. The research and development efforts over the past years which culminated in the publication of 100 modules involved three major phases: (1) research; (2) development, testing, and revision; and (3) dissemination and implementation.

> Under the sponsorship of USOE, the research phase concluded in 1972 with the identification and verification of 384 specific competencies important to vocational teachers. Based on this research, prototype modules were cooperatively developed with the assistance of vocational facilities in Oregon State University and the University of Missouri in an effort sponsored by NIE. After preliminary field testing staff and consultants undertook a major revision effort in 1974 to make the modules more self-contained, to improve the format, to add optional activities and so on.
>
> In 1975, advanced field testing of the 100 revised modules began at 18 institutions-ten under the first phase of the USOE sponsored National Institute for Performance-Based Teacher Education four sponsored by NIE, and four self-sponsored. During the First Phase Institute, 214 persons from the ten institutions (one from each USOE region) and their respective state departments of education were trained as site leaders and resource persons.
>
> .....
>
> During the Second Phase PBTE Institute, conducted in 1976-1977, 464 persons from twenty-five institutions were trained as site leaders and resource persons in the national and institutional workshops. Another 1636 persons received a shorter period of PBTE awareness training, and more than 3250 different inservice and preservice vocational teachers used PBTE concepts and curricular materials.
>
> To date, project staff have been involved directly in the training of resource persons in thirty-eight states and Canada. But in an effort to work toward more large-scale implementation, project staff believe much still needs to be learned about the best ways to organize and manage PBTE

> programs. In working toward this goal, project staff... have undertaken a third phase USOE sponsored project titled Implementing Performance-Based Vocational Teacher Education (1977-1978) The project is designed to assist five leadership institutions in more fully implementing PBTE. Through the activities of these five sites, models of experience and tested strategies will be available to other institutions who want to use this approach. (National Center, 1978)

Wayne State University

The Vocational and Applied Arts Education Department at Wayne State University in Detroit, Michigan was formed in 1971 by the mergence of three former departments: Business and Distributive Education, Family Life Education, and Industrial Education. The purpose of this new department was to "develop a systems approach for the preparation of teachers, supervisors, and administrators in Vocational and Applied Arts Education." A three year study was funded beginning July, 1971 to develop a CBTE Program for the preparation of vocational teachers, in a typical four year context.

The development of professional education competencies became the focus of the VAE program as these were the direct responsibility of the department, and College, as opposed to those regarding general education or content competencies.

The first year accomplishments included:

1. initial design of VAE pre-certification Instructional System. (included five major elements: competencies performance objectives, needs assessment, delivery systems, and evaluation).
2. initial design, documentation and field testing of the Management Information System. (a computer based system which selects, sorts, processes and transmits data to the faculty at a time when it can most efficiently be used, enabling them to make more accurate decisions.

Second year accomplishments included:

1. implementation and revision of the precertification Instructional System

2. criterion-referenced test construction

3. incorporation of a model of field-based operations in the precertification program

4. beginning of a series of in-service teacher education workshops

5. evaluation and revision of all Management and Information subsystems.

6. development of new Management Information subsystems.

Third year concentrations were to be:

1. Continued design and implementation of In-service and MED Program.

2. Implementation of field based operations in VAE programs.

3. Continued refinement of pre-service and in-service programs with emphasis on continued development of criterion referenced tests.

4. Evaluation and refinement of Management Information on subsystem

5. Final documentation of all subsystems

6. Project evaluation.

Among other suggestions offered to those contemplating the implementation of CBTE programs were as follows:

1. The best CBTE design evolves around programs rather than courses.

2. Faculty involvement and communication an absolute must.

3. CBTE programs cannot be adopted in total by other institutions. (Cook, 1973; Cook and Richey, undated; Cook, Neuhauser and Richey, undated)

The University of Maine

The University of Maine, Farmington, Maine, CBTE curriculum was designated specifically for Home Economics Teacher Education, and proceeded through what appeared to be nine stages in order to arrive at a desired program of teacher preparation. These nine stages are outlined and their major points noted. Many share similarities with other mentioned models.

The first stage appears to be selecting home economics career goals. These goals are based on the type of degree desired (Associate, Bachelors), and area of concentration (Family and Child, Textiles and Clothing, Foods and Nutrition, Housing and Home Furnishings, and Consumer Responsibilities), although some exposure to each area appears to be required. The second stage takes the first as its base, and clusters these elements (areas of concentration) into learning modules. The third stage, developing a content outline, follows from the clusters. Stating behavioral objectives is included in the outline, and is the fourth stage. The fifth is to sequence these modules into a logical progression, apparently based on levels of difficulty, and interrelatedness to other content areas. The combining of learning modules into a flow chart and learning packet is the sixth stage, and this helps the prospective teacher to see where she is headed, and what is expected of her. Producing learning packets for individual student use is a very important step, and is the seventh stage. The eighth consists of a screening process, which is a self-check list to determine if important concepts are being addressed. It contains criteria to use to be certain that all important points have been covered (sequencing of modules, between modules, and within modules, cognitive levels, interrelated prospectives in social sciences, and important behaviors). The final stage is the evaluation phase which also covers important points to

be covered.

The design of this model shows how systematically the CBTE curriculum for home economics teacher education is derived, implemented, and evaluated. Goals are specified at the onset, modules are developed, expanded, and evaluated according to consistent criteria. (University of Maine, undated)

The University of Kentucky

The Kentucky model for CBTE stresses flexibility and a curriculum vehicle for implementing competencies. This model is based on four major steps: 1) determining priority areas for competency development; 2) a literature search to identify existing curriculum materials; 3) developing a field review catalog from these first two steps, to be reviewed by an advisory council; and 4) developing a final catalog containing suggestions and revisions from step 3.

In addition to these steps, modules seem to reflect the basic assessment procedures. Personnel developed six catalogs of objectives one of which is child care, and are in the process of developing four more, to include a catalog on food preparation. These ten catalogs together have been used to produce approximately 500 modules which have been field-tested across the state in 20 schools. They have made a serious commitment to the belief that CB(T)E can make a "...significant contribution to the improvement of vocational programs in the state" (Bruce and Carpenter, 1977, p. 61)

University of Georgia

Shearion and Johnson, (1973) have reported on the CBTE program at the University of Georgia, which began in 1968 as a program model for the preparation of elementary school teachers. The program was funded by the USOE to develop specifications for comprehensive undergraduate and in-service teacher

education program. These studies were completed in 1970 and provided a program model for the development of Georgia's CBTE program. The University of Georgia was one of nine institutions selected for this program. It provided for preservice implementation in two stages. The first stage involved the development of an instructional component, which included modular instruction and field-based operations. The second stage was concerned with more comprehensive implementation of a program model, which included most of the features of the general model. In 1973, approximately 500 elementary school teachers were involved in the first stage of implementation, and 200 in the second. Predictions for 1975 reflected the belief that all preservice elementary school teachers would be involved in the CBTE program, with 250 faculty members from 13 public schools engaged in efforts to implement this program.

University of West Virginia

The University of West Virginia reflects an apporach specifically geared toward home economics teacher education at the secondary level. There was a restudy committee formed at the end of 1971 to revise exisiting teacher competencies using an existing comprehensive program for grades 7 through 12, and to develop standards for certification in these competencies, in the areas of vocational education as well as standards for the staff, librarians and school facilities. In order to establish these competencies, they had to outline the important pupil learnings for grades K through 12. From this competency statements were developed in 5 major areas of home economics, and for teaching at different levels. Proposals for certification were formed with the secondary (grades 7 through 12) majors being quite extensive (they also suggested competencies for grades K through 6 as well). However, an

attempt to counter balance this was evident. Their model for CBTE focused on flexibility, both in the required courses and credit hours for certification. New proposals emphasized development of competencies which were not based on credit hours alone (strictly knowledge), but rather on the previous knowledge, experience, and aptitudes that students have acquired. Again, their major focal point is on developing modules which aim at these competencies. (Blankenship and Vickers, 1974)

The University of Michigan

The University of Michigan, Ann Arbor, has developed an Occupational Teacher Education Program which has a competency based orientation. The program groups teacher trainees from trade and industrial, health occupations, business and distributive education for professional courses; common professional teaching competencies are emphasized.

Two hundred and sixty-nine of the 384 competencies identified in the "Model Curricula for Vocational and Technical Teacher Education" project at the Center for Vocational Education, Ohio State University served as the curriculum for the program.

Student competence is developed through a variety of learning experiences. The starting point within the program is dependent upon the entry level skills possessed by each student and the competencies to be developed are grouped according to courses. Upon completion of program requirements a baccalaureate degree is earned and the graduate is qualified for general and vocational teacher certification. (Vogler, 1975)

Florida State University

The Exemplary Competency Based Vocational Teacher Education Program at Florida State University sponsored by the University in cooperation with the Florida State Department of Education, Tallahassee, is a comprehensive program aimed at developing a viable competency-based approach to preparing vocational teachers, administrators, supervisors and related professionals.

The specific goal is the development of an exemplary competency based vocational teacher education and leadership development program.

The program which began the fall of 1975 in industrial, technical, business and distributive education had the following objectives:

1. Identification and validation of professional competencies important to vocational teachers and professional support personnel.

2. Identification and validation of specific assessment criteria for assessing mastery of competencies.

3. Development and/or adoption of performance based, self paced learning packages designed to help participants master important competencies.

4. Development of evaluation instruments and strategies providing for objective assessment of competency mastery while the participant is performing in an actual school situation.

5. Implementation of a competency based program in a traditional university setting.

6. Development of instruments and strategies for overall program evaluation.

A series of reports, one from each of the involved service areas focused on the competency and criteria identification phase of this exemplary program. From reviewing these reports, it appears that the overall project is quite extensive and has involved much research and development with the CBTE

concept. (Andreyka and Blank, 1976)

University of Rhode Island

Cooperation among the vocational areas of agriculture, home economics, and business teacher education at the University of Rhode Island began when the University of Rhode Island Council of Vocational Teacher Educators was founded in 1973. At the same time faculty in agriculture and home economics were members of the New England Council of Vocational Teacher Educators and were involved in an awareness project in PBTE (Performance Based Teacher Education) directed by Dr. Art Berry, University of Maine, Portland. This paved the way for the first cooperative effort in involvement with the National PBTE Project that was being carried out by the National Center for Research in Vocational Education at Ohio State University.

In 1975-1976, the University of Rhode Island was asked to test the PBTE Supervision modules (I-6, I-7, I-8) developed by The Center. This was done with twenty in-service agriculture and home economics teachers, in a graduate course, "Supervision of Student Teachers," team taught by agriculture and home economics teacher educators, and also with a volunteer group of agriculture and home economics cooperating teachers who had student teachers in their schools. Thus, this group of in-service teachers and cooperating teachers were familiarized with PBTE and trained as Resource Persons to work with student teachers using the competency based teacher education approach.

The University of Rhode Island was selected as one of twenty institutions in 1976-1977 to conduct awareness seminars and/or workshops for administrators, vocational education personnel, cooperating teachers and pre-service teachers. The focus of these activities was to make all vocational teacher educators

and others aware of what competency/performance based teacher education was, the State of the Act of the PBTE Project, and the 100 modules developed by the Center. An EPDA grant of $20,000 was awarded the university to aid in implementing these activities. For the 1976-1977 project, the areas of business education and trade and industrial education were also involved.

For the 1977-1978 year the University of Rhode Island was selected to be one of five sites to be involved in the Implementation PBTE Project of the National Center for Research in Vocational Education. An EPDA grant of $10,000 was received to conduct these activities. PBTE Task Forces were developed, competencies verified, and implemented in all vocational courses that took place.

At the same time, Resource Centers in the College of Home Economics and the College of Resource Development were established so materials and resources could be used in an individualized basis. A Student Teacher Handbook based upon the CBTE approach was also developed.

Awareness activities and feedback from Advisory Committees, cooperating teachers, teachers and pre-service teachers are on-going activities.

Future goals for 1978-79 are: develop written rationale for PBTE at the University of Rhode Island; final identification of teaching competencies related to all vocational teacher education courses; increased individualization of instruction; develop better management and record keeping procedures; and identifying and obtaining increased funding for pre/in-service education activities. (Kelly, 1978)

Other Cooperative Competency Based Vocational Teacher Education Programs

In addition to the University of Rhode Island, the four other sites for the 1977-1978 Center project on the Implementation of PBTE, have all involved two or more of the vocational service areas in the competency based approach in their teacher education programs. They are: Temple University, Philadelphia; Purdue University, West Lafayette; State University College at Utica/Rome, Utica; and Utah State University, Logan.

This section has attempted to describe some general features of a CBTE model, by outlining the five major steps as proposed by Kohlman, and has added two other desirable elements, a *human relations program,* and an *advisory committee.* The various models of CBTE which have been outlined have been meant to serve as illustrations of this general model, in addition to indicating some of the unique individual characteristics they contain. These examples are representative models of CBTE programs across the country. We recognize and concede to the fact that they represent only a small portion of the totality of Competency-Based Teacher Education curricula currently being implemented.

3

PROCEDURE

The purpose of the study was to use the base data of cited competency studies and data gleaned from the survey of State Supervisors of Home Economics to develop a model to use in determining the feasibility of establishing a competency based program in home economics teacher education at the University of Delaware with implications for other vocational teacher education programs in the state.

Review of Literature

The first step of the study was to briefly identify the current state of the art of CBTE; its definition, characteristics, methods and models for implementation. Sources used to locate this information included in ERIC search, a review of professional publications in which CBTE information appeared and papers on CBTE presented at various professional meetings.

Survey of State Supervisors of Home Economics

November, 1977 a survey instrument (appendix A) was mailed to fifty-six state supervisors of home economics including Guam and the Virgin Islands, Trust Territory of Pacific Island, Puerto Rico, American Samoa, and the District of Columbia to learn to what extent CBTE programs were being implemented in college programs which prepare vocational home economics teachers in the respective states.

Development of Model

From the data gleaned from the literature, the survey of state home economics supervisors the model was developed.

Review of Model

Upon completion of the model all Delaware Vocational Teacher Educators were invited to a seminar where the model was presented for review and evaluation. (Appendix B) At that time those present were queried as to their perceptions of the needs and their interests in implementing the competency-based approach in teacher education in the respective vocational subject areas.

4

FINDINGS

Survey of The Current Status of Competency Based Home Economics Teacher Education Programs in The U.S.

and

Model For Implementing CBTE In Home Economics in Delaware

Survey Findings

In order to obtain the general status of home economics competency based teacher education within the United States and its Territories, fifty-six State Supervisors of Home Economics Education were contacted by a mailed questionnaire. Each of the fifty states were included in this grouping along with the areas of Guam, the Virgin Islands, the Trust Territory of the Pacific Island, American Samoa, the District of Columbia and Puerto Rico. Completed surveys were received from thirty-five of the fifty-six state supervisors.

Since the territorial regions of Guam and the Virgin Islands and the state of Alaska reported no teacher education programs in existence, the reported findings will be based on thirty-two completed instruments. These resulting surveys have been classified into five general geographic regions; Eastern, Mid-West, Central, West, Southern and Territories. The findings are reported by regions and in some cases individual states. See appendix C for complete list of reporting states.

Within the regions results indicated the existence of 176 institutions which prepare vocational home economics teachers. The midwestern region with five reporting states had the highest number, forty-seven, of teacher

education programs available. Individually, however, the state of California appeared to offer the most opportunities, in terms of number of institutions, twenty-one, for teacher education. (TABLE 1)

Of these 176 institutions, fifty-nine were reported to have initiated some aspect of competency based education for home economics teacher preparation since September of 1973. Oregon and Iowa reported the conception of CBTE programs prior to September of 1973, accounting for four additional programs. This number cannot be considered complete as six states were unable to provide this information. Results indicated the highest percentage of implementation since September of 1973 to have occurred in the midwest region with seventeen programs or 44.8% of the reported institutions implementing CBTE since September, 1973, as reported in Table 2. Generally, it appeared that evaluation of the existing CBTE programs has not been undertaken. It should be noted, however, that nine states were unable to provide information at this level. (TABLE 3)

Findings indicated that the majority of the institutions involved with home economics teacher education are implementing or are planning to implement some form of competency based teacher education. Perhaps one of the most important findings concerning the implementation of some aspects of CBTE is that only eight of the reported 176 institutions are not involved in some way with this method of education at the present time. This planning and/or involvement cannot be categorized and may only concern individual courses rather than whole programs. (TABLE 4)

TABLE 1

NUMBER OF VOCATIONAL HOME ECONOMICS TEACHER EDUCATION PROGRAMS
IN THE UNITED STATES BY REGION

REGION STATE-NUMBER OF PROGRAMS				NUMBER OF STATES AND TERRITORIES REPORTING	TOTAL PROGRAMS
EASTERN				8	28
CT	2	RI	1		
ME	2	VT	1		
NH	4	NY	11		
DE	2	MD	5		
MIDWEST				5	47
OH	9	MI	13		
IN	10	IL	7		
KY	8				
CENTRAL				8	34
IA	3	SD	1		
MN	9	KS	7		
ND	2	MO	8		
CO	2	MT	2		
SOUTHERN				4	29
TN	8	FL	4		
VA	9	AL	8		
WESTERN				8	38
UT	3	OR	1		
NV	1	WA	4		
NM	5	AK	0		
CA	21	ID	3		
TERRITORIES				2	0
GUAM		0			
VIRGIN ISLANDS		0			
			TOTAL	35	176

TABLE 2

HOME ECONOMICS TEACHER EDUCATION PROGRAMS
IMPLEMENTING OF SOME ASPECT OF CBTE
SINCE SEPTEMBER, 1973, BY REGION

REGION	States Reporting N	HE Teacher Educ. Programs N	HE CBTE since 9/19/73 N	% of Total
Eastern	8	28	4	14.3
Midwest	5	47	16	34.0
Central	8	34	12*	35.3
Southern	4	29	14	48.3
Western	8	38	17**	44.8
TOTAL	33	176	63	35.8

* Including 3 in Iowa conceptualized prior to 1973

** Including 1 in Oregon conceptualized prior to 1973

TABLE 3

EVALUATION OF HOME ECONOMICS COMPETENCY BASED TEACHER EDUCATION PROGRAMS BY REGION

Region	Programs Evaluated N
Eastern	0
Midwest	1
Central	2
Southern	0
Western	7

TABLE 4

COMPARISON OF HOME ECONOMICS TEACHER EDUCATION PROGRAMS WHICH HAVE IMPLEMENTED CBTE, PLANNING CBTE PROGRAMS AND THOSE NOT INVOLVED IN CBTE, BY REGION

REGION	TEACHER EDUCATION PROGRAMS	CBTE SINCE 1973	PLANNING CBTE	NOT INVOLVED WITH CBTE TO DATE
	N	N	N	N
EASTERN				
CONNECTICUT	2	?	2	0
MAINE	2	0	2	0
NEW HAMPSHIRE	4	1	?	3
RHODE ISLAND	1	1	-	0
VERMONT	1	N/R	N/R	N/R
NEW YORK	11	?	11	0
DELAWARE	2	2	2	0
MARYLAND	5	0	0	5
TOTAL	28	4	18	8
MIDWEST				
OHIO	9	1	?	0
INDIANA	10	?	?	?
KENTUCKY	8	1	8	0
MICHIGAN	13	13	13	0
ILLINOIS	7	1	7	0
TOTAL	47	16	28	0
CENTRAL				
IOWA	3	3*	0	0
MINNESOTA	9	?	?	0
NORTH DAKOTA	2	1	1	0
SOUTH DAKOTA	1	1	0	0
KANSAS	7	7	7	0
MISSOURI	8	0	8	0
COLORADO	2	0	0	0
MONTANA	2	N/R	N/R	N/R
TOTAL	34	12	16	0

*Prior to 1973

TABLE 4 (Cont'd.)

COMPARISON OF HOME ECONOMICS TEACHER EDUCATION PROGRAMS WHICH HAVE IMPLEMENTED CBTE, PLANNING CBTE PROGRAMS AND THOSE NOT INVOLVED IN CBTE TO DATE, BY REGION

REGION	TEACHER EDUCATION PROGRAMS	CBTE SINCE 1973	PLANNING CBTE	NOT INVOLVED WITH CBTE TO DATE
	N	N	N	N
SOUTHERN				
TENNESSEE *	8	4	4	0
VIRGINIA	9	9	9	0
FLORIDA	4	1	4	0
ALABAMA	8	0	8	0
TOTAL	29	14	25	0
*Based on information from 4 institutions				
WESTERN				
UTAH	3	3	3	0
NEVADA	1	1	1	0
NEW MEXICO	5	5	5	0
CALIFORNIA	21	?	?	0
OREGON	1	1*	-	0
WASHINGTON	4	4	0	0
IDAHO	3	3	3	0
TOTAL	38	17	12	0
*Prior to 1973				
GRAND TOTAL	176	63	96	8

Factors Surrounding the Implementation of CBTE

In reviewing the following findings care should be exercised in the interpretation of these results since they do not indicate the number of institutions associated with them, but rather a more general application by total state involvement.

The factors most influencing the trend toward some form of competency based teacher preparation appears to be the desire to improve and upgrade education programs with twenty of the thirty-two reporting states indicating this need. Another contributing factor is the implementation of competency based education at the elementary and/or secondary level with thirteen states recording this development. Nine of the reporting states offered more than one reason for implementing competency based teacher preparation. Only one state, Oregon, indicated the need to implement CBTE for state certification requirements. Due to a lack of information or the lack of implementation of CBTE programs, seven states were unable to indicate factors which might influence the conception of competency based education. (TABLE 5)

Professional education competencies for CBTE programs were identified in a variety of ways. Results indicate that fifteen of the states identified their own professional education competencies. However, eleven of these same states used other sources as references in this identification process. Providing the most help in the area of identification of professional education competencies appeared to be the competencies developed by the National Center for Research in Vocational Education at Ohio State University, and those of home economics programs in the same state or another state. Again, it should be noted that eight of the thirty-two respondents were unable to offer infor-

TABLE 5

RATIONALE FOR IMPLEMENTATION OF HOME ECONOMICS CBTE PROGRAMS, BY REGION

RATIONALE	REGION					TOTAL
	EAST	MIDWEST	CENTRAL	SOUTH	WEST	
STATE CERTIFICATION REQUIREMENT					OR	1
CBE AT ELEMENTARY AND/OR SECONDARY LEVEL IN STATE	ME NY DE	IN KY MI IL		VA AL	UT NV NM OR	13
UPGRADE AND IMPROVE EDUCATIONAL PROGRAMS	CT,DE ME NH RI	OH IN MI IL	IA ND SD KS	TN VA	UT NM OR WA	20
OTHER	RI*				CA**	2
NO RESPONSE N/A	VT MD		MN MS CO MT	FL		7

* RI - Involved in testing National Center Modules

* * CA - Rationale not categorized, varies with individual institution.

mation concerning identification of professional education competencies, due to the lack of information or the inapplicability of this concern. (TABLE 6)

Results indicated that a variety of methods were used in the identification of content competencies. Eleven out of the thirteen states which identified their own content competencies were also found to use other resources to accomplish this task. It appeared that the AHEA, 1974 publication, COMPETENCY-BASED PROFESSIONAL EDUCATION IN HOME ECONOMICS, was utilized most often on the basis of state-wide reports.

Ten of the thirty-two responding states provided no information concerning this identification process. Two states, Kentucky and Rhode Island, reported that they had not yet identified content competencies. (TABLE 7)

In conjunction with the institutions' self-development of instructional materials used in programs, appeared to be the acquisition of materials developed by other program areas. Modules developed by the National Center for Research in Vocational Education at Ohio State University, also, seemed to aid in the preparation of vocational home economics teachers participating in competency based education. (TABLE 8)

The primary method used to acquaint faculty and students with this relatively new educational concept appeared to be seminars and workshops as twenty-one of the thirty-two states responding indicated the use of them for preparation. Only two states indicated that there had not been an introduction to CBTE offered to faculty and students of some institutions. It appeared that generally, all institutions involved with CBTE found it desirable to initiate faculty and students to this educational concept. No

TABLE 6

METHODS USED TO IDENTIFY PROFESSIONAL EDUCATION COMPETENCIES FOR USE IN IMPLEMENTING CBTE PROGRAMS, BY REGION

METHOD	REGION					TOTAL
	EAST	MIDWEST	CENTRAL	SOUTH	WEST	
IDENTIFIED OWN COMPETENCIES	DE NH ME CT	IL - OH* MI KY IN	SD ND IA**	FL TN	ID	15
USED OR MODIFIED COMPETENCIES DEVELOPED BY CENTER FOR VOCATIONAL EDUCATION	RI ME CT	IL MI IN		VA	ID NV UT	10
MODIFIED THOSE DEVELOPED BY OTHER PROGRAMS	DE NH**	MI IN	KS SD	VA TN	CA NM UY	11
OTHER	NH				WA** OR** NV**	4
NO RESPONSE OR N/A	MD NY VT		MT CO MO MN	AL		8

* OH-used all available sources
** IO-AHEA
** WA-AHEA
** OR-AHEA
** NV-AHEA
*** NH-Commercial Program

TABLE 7

METHOD USED TO IDENTIFY HOME ECONOMICS CONTENT COMPETENCIES FOR USE IN IMPLEMENTING CBTE PROGRAMS, BY REGION

METHOD	REGION					TOTAL
	EAST	MIDWEST	CENTRAL	SOUTH	WEST	
IDENTIFIED OWN COMPETENCIES	CT ME NH	OH MI IL	IA ND SK	TN FL	OR ID	13
STATE CURRICULUM CONCEPTS	CT	OH MI IL		TN FL	ID UT NM WA	10
AHEA 1967	NH	OH MI	KS	TN VA	WA UT ID NV NM	12
AHEA 1964	ME	OH MI	SK KS	TN VA FL	WA UT ID NV CA NM	14
OTHER	RI*	KT*	IA*	TN*	CA*	5
NO RESPONSE-N/A	MD DE VT NY	IN	MT MI MS CO	AL		10

*RI-have not identified content competencies
KT-have not identified content competencies
IA-materials from Kansas City Working Clinic
TN-Workshop on CBTE
CA-a task Force identified

TABLE 8

METHOD USED TO ACQUIRE INSTRUCTIONAL MATERIALS TO BE USED IN IMPLEMENTING CBTE PROGRAMS, BY REGION

METHOD	REGION					TOTAL
	EAST	MIDWEST	CENTRAL	SOUTH	WEST	
DEVELOPED OWN	DE ME CT	OH IL MI KY	SD ND IO	FL TE	UT ID WA OR	16
USED MATERIALS DEVELOPED BY OTHER PROGRAM AREAS	CT DE NH ME	OH IL MI		VA TE	ID NM WA UT OR	14
MODULES DEVELOPED BY CENTER FOR VOCATIONAL EDUCATION	RI* ME	IN OH	KA		ID UT WA NV	9
OTHER	RI NH*	MI*			CA*	4
NO RESPONSE - N/A	VT NY MD	IN	MN MS MO CO	AL		9

*RI-plus some of own and plus resource materials
NH-Commercial program
MI-Used ones developed by other Michigan Institutions
CA-State developed modules

response was offered by nine of the thirty-two states as information was unavailable or unwarranted since CBTE programs did not exist. (TABLE 9)

Results of this survey seemed to indicate that institutions involved with CBTE in thirteen states work with local schools. Of these thirteen states eight offered insight into the manner in which this work is carried out. Involving teachers as task force representatives or advisors was a method employed by four states. Michigan and Utah institutions provided inservice or preservice training. Connecticut remarked that this work was not developed and occurred mostly through student teachers.

Fourteen states indicated the occurrence of an involvement with the state bureau of certification however, the methods used provided by eight states to accomplish this task were varied and unable to be classified. Only seven states reported working with college and/or university administrative offices. North Dakota remarked that this program was pass-fail and work occurred to establish such a system. Eleven of the thirty-two states were unable to indicate how, or if, institutions involved with CBTE worked with varying groups of people about the competency based teacher education programs. (TABLE 10)

Although fifteen states were unable to provide insight into the acquisition of fiscal and physical support, it appears that in the majority of cases, (fourteen), a reallocation of resources was necessary to provide support for competency based teacher education. In seven states grant monies had also been available. Results indicated that some of the states need to employ more than one method to finance this endeavor. (TABLE 11)

TABLE 9

METHOD USED TO PREPARE FACULTY AND STUDENTS WITH THE CONCEPT OF CBTE, BY REGION

METHOD	REGION					TOTAL
	EAST	MIDWEST	CENTRAL	SOUTH	WEST	
SEMINARS-WORKSHOPS	CT DE ME RI NH	OH IN IL MI	IA ND	TN VA FL	WA UT OR NV CA	21
OPEN MEETINGS	CT DE	OH IL	IA SD	TN VA FL	CA	10
NO PREPARATION	NH		KS			2
NO RESPONSE	VT NY MD		MN MS MT CO	AL		8

* KT - Through regular home economics program

* FL - University developed concept throughout FIU facilities.
- University procedure

TABLE 10

METHODS USED TO ACQUAINT SELECTED GROUPS OF PEOPLE WITH CBTE PROGRAMS, BY REGION

METHOD	REGION					TOTAL
	EAST	MIDWEST	CENTRAL	SOUTH	WEST	
LEA'S	CT	MI KY	SD IO	VA TE	UT NV ID WA CA NM	13
SEA'S	CT NH RI ME DE	OH	ND	TE	ID NV CA WA OR	14
COLLEGE/UNIVERSITY ADMINISTRATIVE OFFICE	NH ME	OH	ND	TE	NV NM	7
NO RESPONSE - N/A	VT NY MD	IN	MO KA MN CO MO	AL FL		11

TABLE 11

METHODS OF PROVIDING FISCAL AND PHYSICAL SUPPORT FOR CBTE PROGRAMS, BY REGION

METHOD	REGION					TOTAL
	EAST	MIDWEST	CENTRAL	SOUTH	WEST	
GRANT MONIES	RI DE		IO ND	TE	CA WA	7
REALLOCATION OF RESOURCES	ME NH DE	OH MI IL	IO* ND	TE VA	WA UT NV NM	14
OTHER	NH*		IO	TE*		3
NO RESPONSE-N/A	VT NY MD	IN KY	KA MN MS MO CO	AL FL	OR ID	15
NONE	CT					1

*NH-student fees

*Iowa-budgeted

*TE-budgeted within the department

Discussion

The review of current literature and the findings of the survey of State Supervisors of Home Economics revealed a wide variety of types of Competency Based Teacher Education programs in existence. As thirty-five of the fifty-six, or sixty-three percent of the state supervisors responded it is highly probable that the information in this report represents only a portion of the work being done in home economics teacher education programs in relation to the competency based approach.

The categories of inquiry on the survey were selected based on the "commonly identified" component parts of a CBTE program, in hopes of identifying ways personnel in various states developed these, if CBTE programs had been implemented.

Although a definition of CBTE was established for the purposes of this study and so recorded on the survey instrument, several individuals indicated that CBTE was interpreted in a different manner in their state. Likewise, the literature revealed many definitions and therefore it becomes very difficult if not impossible to make comparisons between programs and/or states. However, it can be said that many states and teacher education institutions are "into" CBTE in one form or another.

Generalizations cannot be made about entire programs and transferred to others, however certain components i.e. competencies, objectives, modules, etc. can be evaluated and statements made.

Little can be said about the effectiveness of home economics, or other content area CBTE programs, as so few programs have been evaluated or if they have, data did not seem to be available.

Even though there were forty percent of the states unaccounted for in regard to CBTE programs in home economics in this study, and the number of model programs reported in this study is small, there seems to be sufficient evidence that the teacher educators at the University of Delaware can use the model that appears on the following page to evaluate the present teacher education program with consideration of implementing the competency based approach.

Model for Implementing CBTE in Home Economics in Delaware

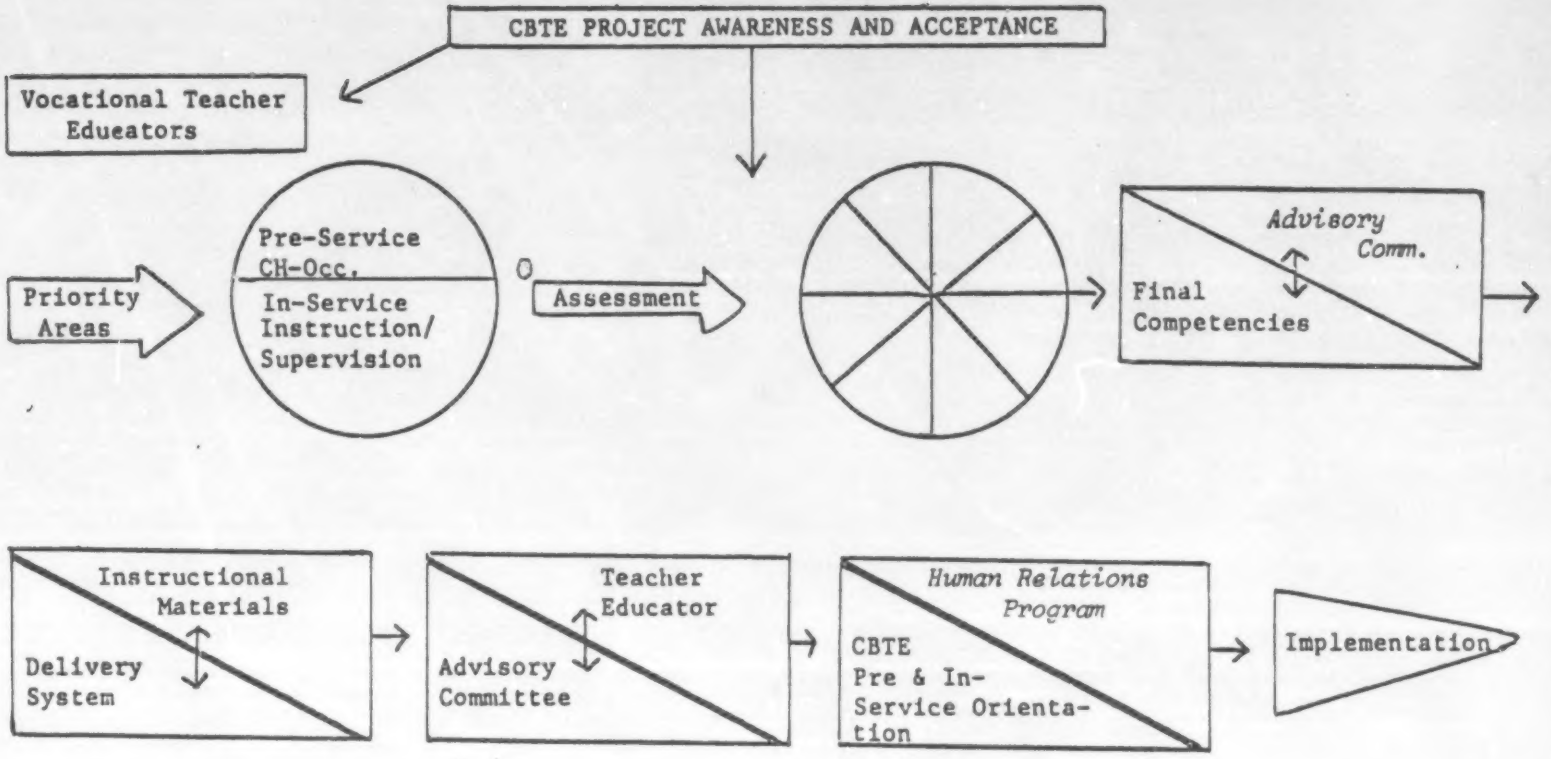
The focus of this study was the development of a conceptual model that could be used to determine the feasibility of implementing the competency based approach in the home economics teacher education program at the University of Delaware, with implications for other vocational teacher education programs in the state. Using information gleaned from the survey and literature the model as depicted in Figure 1 was developed.

Process for Implementing Model

1.) As CBTE is a relatively new concept an initial awareness and acceptance project would be designed for all teacher educators and personnel of all sectors of the community which would be assessed to help identify tentative competencies. 2.) Teacher educators would then identify the priority areas in which to pursue competency based aspects, as literature does not seem to reveal "the one" starting place. 3.) Once the priority area(s) had been established as assessment of the professional literature, present course offerings, local administrators, teacher educators and *advisory committee* members would be carried out to establish tentative competencies. 4.) In cooperation with the *advisory committee* the final set of competencies would be determined. 5.) Development of a delivery system including methods and approaches, as well as evaluation procedures would be completed by teacher educators who would seek input from the *advisory committee* members. 6.) In preparation for implementation of the CBTE program orientation sessions and *human relations* programs would be made operational.

Figure 1

MODEL FOR IMPLEMENTING COMPETENCY BASED TEACHER EDUCATION IN HOME ECONOMICS IN DELAWARE



This process with its six phases has several implications for CBTE development. First it offers a systematic approach to curriculum development. All too often change is made for the sake of change. The first stage in the process helps overcome this by identifying the priority areas for review. A second implication may be in terms of long range program planning. This prevents the development of modules without programs, or programs with performance but without competencies, etc.

The third implication is that the various components can be developed, piloted, revised and put back into the system, ultimately leading to program improvement.

Presentation of Findings to Delaware Vocational Teacher Educators

This study was reported in two parts: 1.) findings of the review of literature and results of the survey of state supervisors of home economics reagarding home economics CBTE programs in the resppective states, and 2.) presentation of the model for implementing CBTE in home economics at the University of Delaware.

Those vocational teacher educators present were enthusiastic about the project and at the prospect of the group working together on this and other concerns.

In terms of expressed needs and interests of the group in relation to CBTE the following statements were recorded.

1. As the vocational teacher educators in the state had not previously met as a group or worked together on common concerns it was decided that meeting on a somewhat regular basis to discuss common concerns, including CBTE was the first priority.

2. At another meeting share what each area is doing or planning to do with the competency based approach in the teacher education program.
3. Various members of the group expressed a desire to visit some of the sites where there are joint vocational CBTE programs. The State EPDA Coordinator indicated that perhaps there might be some carry-over funds from the 1977-78 EPDA Externship Program that could be applied for to be used in this way. Dr. Sites (EPDA Coordinator) requested this investigator to draft a follow-up memo of the seminar to all vocational teacher educators in Delaware (13) alerting them of this possibility. (Appendix B).
4. Hold a vocational teacher educators' group meeting in early Fall, 1978 to discuss the findings of the professional visits (if follow through was possible) and to discuss possible ways of cooperating on the CBTE approach in Delaware.
5. The group agreed that the proposed model would be a feasible systematic way of beginning formal study of CBTE.

The investigator was most pleased with the eagerness that was expressed on the part of colleagues present to begin work together on this and other pertinent concerns of the group.

5

SUMMARY AND RECOMMENDATIONS

Having reported on the various definitions, the component parts, and some examples of existing models of Competency-Based Teacher Education programs, an attempt will be made to address the effects of CBTE on the teacher education program in general.

General Effects

Through its preliminary testing and implementation stages, certain changes in the CBTE curriculum might be advisable. Ainsworth (1977) has suggested that CBTE programs must decide how to achieve acceptable performance from all prospective teachers. In certain cases, he fears that the standard would have to be set quite low in order to allow most students to demonstrate competence. He contrasts the competency-based system, where one standard of competence is the acceptable level, to the norm-based system, which allows for a gradation of standards. Thus, a learner who cannot achieve this standard feels frustrated and may give up. On the other hand, a learner who has the ability to do above-average work may realize that this is no longer necessary, and may settle for less than he/she is capable of doing. These examples point to some important considerations in regard to the derivation of standards for CBTE. This goes hand in hand with whether the competency is to be graded or somehow scaled to show the exact level of achievement, or whether the competency will be standard and credit or recognition given for any skills above the required level.

A second point that Ainsworth (1977) makes is the CBTE focuses on the performance, rather than the class attendance of a student. This would mean that course-based exercises (quizzes and tests especially) would be eliminated in favor of performance-based methods (practice in demonstration of performance objectives). This might help to alleviate some of the pressures associated with the former method, and might allow instructors and/or other learners to assist in the development of the latter.

Gillie (1974) pointed out a third effect of CBTE in reference to "traditional" teacher education programs. Basically a critic of CBTE, he believes that an arbitrary attempt to identify competencies, followed by attempts to verify them, should be avoided. However, this appears to have been successfully avoided through models which focus on educational goals and desired end behaviors i.e. the West Virginia and Maine modules, and then develop the performance objectives, modules, and learning experiences to accompany these.

Gillie (1974) believes that teaching is both a science and an art. And although he disagrees with many of the concepts of CBTE, he asserts that;

> "the important result of vocational teaching is what happens to the persons involved in the process - and this evolves largely out of its art component. The development of humane, empathetic, and interesting teachers ought to take precedence over all else." (p. 31)

It seems that this effect could be achieved through the *human relations* component of the CBTE model outlined earlier in the paper.

Finally, a look at some data compiled from a study on pre-service teachers of CBTE versus traditional methods of instruction, will give some indication of the actual effects of CBTE on those for whom it is designed. Students were categorized in two groups; a teacher-directed and a student-directed instructional technique. Both sets expressed a favorable attitude as well as enthusiasm, towards the CBTE method. (Bell and Cummings, 1976) They have summarized the effects of CBTE in the following way:

> The unique strength of the competency-based education approach is that it challenges all who touch it to be open about their intentions and explicit about how they will decide if their hopes are fulfilled. Ends must be made explicit, means must stand the test of relevance. The logic of a performance-based approach places a healthy stress on the use of evidence to test one's ideas and assumptions (Performance-Based Teacher Education Committee of the American Association of Colleges for Teacher Education, 1974). (p. 87)

This statement points out some possible effects of CBTE on those who use it. These effects on prospective teachers should be seriously considered, as they will be the ones most involved. Also, the affects of standards, performance, processes for developing competencies, and *human relations* training should be regarded insofar as they increase or decrease the effectiveness, and therefore, the quality of a CBTE program on a prospective teacher's professional development.

Recommendations

The above quotation also leads to some recommendations for consideration. CBTE focuses on the planning and designing of curriculum with specific ends and means in mind. It also places a responsibility on the learner to take an active role in the learning process.

Tyler (1976) believes that curriculum has long overlooked the learner as an active participant in his own education. He says that,

> If learning is to be both effective and lasting, it is necessary for the school to give special emphasis to the implications of the learners active role when it selects objectives, designs and sequences learning experiences, and strives to achieve transfer-of-training. (p. 71)

It is pointed out that CBTE attempts to do each of those things when it focuses on end behaviors and goals when choosing competencies; when it selects performance objectives to achieve these competencies, and when it plans learning modules and activities.

Development of the CBTE curriculum should come from a team effort, in this case it would include home economics teachers, and home economists from business, universities, and social service agencies, as suggested by Blankenship and Vickers (1974). It should provide flexibility and choices for students/prospective teachers to enter the program through different routes which relate to their individual interests, abilities, and limitations. CBTE should define the competencies specifically in terms of teacher education and should be seeking the most effective ways for operationalizing and implementing new standards. It is believed that this will come as additional research reveals the information on which to have these standards.

Finally, this chapter on Performance/Competency-Based Teacher Education will be closed by quoting from Massanari's educational strategy. It is believed that it effectively summarizes what has been attempted to be expressed in regard to defining the concept and component parts; careful planning and derivation of competencies, learning modules, and other instructional

activities developing a workable model; and looking at its effects on teacher education, and on the entire educational structure as well.

> Performance-based teacher education (PBTE) is a potentially powerful educational strategy which, if appropriately and wisely implemented, can bring about needed reforms in teacher education. Its implementation has ramifications which could affect the entire educational system. While the term suggests that PBTE is applicable only to the pre-and in-service education of teachers, its applicability extends beyond this one area of educational personnel development. PBTE has the potential to revolutionize the entire field of educational personnel development through its emphasis on clearly stated role-derived objectives, the individualization and personalization of instruction, a field-centered approach, prespecified performance mastery levels and modes of assessment, the demonstration of desired competencies by students before exiting from training programs, and a systematically developed program and evaluation process. (p. 179)

References Cited

Ainsworth, David. "Examining the Basis for Competency-Based Education." Journal of Higher Education 48 (May/June 1977):321-32.

American Home Economics Association. Competency-Based Professional Education in Home Economics: Selected Competencies and Criteria. Washington, D.C.: American Home Economics Association, 1974.

Andreyka, Robert E., and William Blank. Florida State University Exemplary Competency-Based Vocational Teacher Education Project: Vocational Business Education Component Competency Identification Phase: Professional Competencies for Vocational Business Education Teachers in Florida. Series #4, 1976, Bethesda, Maryland: ERIC Document Reproduction Service, ED 131272, 1976.

Bell, Camille G. and Merrilyn Niederwerfer Cummings. "Two Methods of Implementing a Home Economics Competency-Based Education Approach." Home Economics Research Journal 5 (December 1976):79-87.

Blankenship, Martha Lee and Carole Vickers. "What Billionth for Beginning Home-Ec Teachers?" American Vocational Journal 49 (April 1974):50-1.

Bruce, Herbert Jr., and Bruce Carpenter. "Competency-Based Curriculum, Kentucky Model." American Vocational Journal 52 (January 1977):58-61.

Cook, Fred S., Carlotte L. Neuhauser, and Rita C. Richey. "A Competency-Based Teacher Education System: An Integrated Instructional and Management Information System." Detroit, Michigan: Department of Vocational and Applied Arts Education, College of Education, Wayne State University. (undated)

Cook, Fred. A Systems Approach to Vocational Teacher Education: Progress Report 1972-1973, Wayne State University, Detroit, Michigan. Bethesda, Maryland: ERIC Document Reproduction Service, ED 080 695, 1973.

Cook, Fred S., and Rita C. Richey. A Competency Based Program for Preparing Vocational Teachers. Detroit, Michigan, Wayne State University. (undated)

Dodl, Norman R. "Selecting Competency Outcomes for Teacher Education." Journal of Teacher Education 24 (Fall 1973):194-99.

Dupuis, Victor L. and Paul E. Bell. "A Modular Approach to Vocational Curriculum." American Vocational Journal 49 (April 1974):34-36.

Elam, Stanley. Performance Based Teacher Education: What is the State of the Art? PBTE Series: No. 1, Washington, D.C: AACTE, 1971.

Gillie, Angelo C., Sr. "Competency-Based Teacher Education: A Plea for Caution." American Vocational Journal 49 (April 1974):30-31.

"Goals and Objectives of the Home Economics Department at the University of Maine at Farmington." Farmington, Maine. (undated)

Hamilton, James B. and Karen M. Quinn. Resource Person Guide to Using Performance-Based Teacher Education Materials. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1975.

Harris, Ruth D. and Curtis R. Finch. "The Challenge of Competency-Based Teacher Education." Edited by Harris and Finch: Implementing Competency-Based Teacher Education: Future Directions for Vocational Teacher Educators. Blacksburg, Virginia: Division of Vocational and Technical Education, Virginia Polytechnic Institute and State University, 1976.

Hertzberg, Hazel Whitman. "Competency-Based Teacher Education: Does It Have a Past or a Future?" Teachers College Record 78 (September 1976): 1-20.

Home Economics Teacher Educators of Pennsylvania. "Competency-Based Professional Education for Home Economics Teachers." Reading, Pennsylvania: Albright College Print Shop, 1976.

Houston, W. Robert. "Designing Competency-Based Instructional Systems." Journal of Teacher Education 24 (Fall 1973):200-204.

Hughes, Ruth P. and Alyce Fanslow. "Evaluation: A Neglected Area of Competency-Based Education." Journal of Home Economics 67 (September 1975):23-25.

Kay, Patricia M., and Karl Massanari. PBTE: Where to From Here? Washington, D.C.: AACTE, October, 1977 .

Kelly, Patricia S., University of Rhode Island, College of Home Economics, Kingston, Rhode Island. Interview June 14, 1978.

Klingstedt, Joe Lars. "Learning Modules for Competency-Based Teacher Education." Educational Technology 12 (November 1972):29-31.

Kohlman, Eleanor L. "A Model for Competency-Based Teacher Education." Journal of Home Economics 67 (September 1975):19-22.

Lindsey, Margaret. "Performance-Based Teacher Education: Examination of a Slogan." Journal of Teacher Education 24 (Fall 1973):180-86.

Massanari, Karl. "Performance-Based Teacher Education." Journal of Teacher Education 24 (Fall 1973):179.

National Center for Research in Vocational Education. Centergram, Columbus, Ohio: National Center for Research in Vocational Education, The Ohio State University, Vol. XII, No. 4, April, 1978.

Norton, Robert E. "PBTE: A Promise Being Fulfilled." Paper prepared for USOE Region VI Inservice Training for Vocational-Technical Personnel Conference, Irving, Texas, October 4-7, 1977.

Resnick, Harold S. and Shirley H. Carnody. Analysis and Synthesis of Competencies Needed by Vocational and Career Educators: Phase I of a Professional Development Study for Massachusetts. Bethesda, Maryland: ERIC Document Reproduction Service, ED 137570, 1977.

Schmieder, Allen A. Competency-Based Education: The State of the Scene, PBTE Series: No. 9, Washington, D.C.: AACTE, 1973.

Shearron, Gilbert F. and Charles E. Johnson. "A CBTE Program in Action: University of Georgia." Journal of Teacher Education 24 (Fall 1973):

Tyler, Ralph W. "Two New Emphases in Curriculum Development." Educational Leadership 34 (October 1976):61-71.

Vogler, Daniel E. Competency-Based Capstone, Comprehensive Occupational Teacher Education Project. Final Report University of Michigan, Ann Arbor, Michigan. Bethesda, Maryland: ERIC Document Reproduction Series, ED 122066, 1975.

APPENDIX A

COVER LETTER
SURVEY INSTRUMENT

UNIVERSITY OF DELAWARE
NEWARK, DELAWARE
19711

EPDA RESEARCH
104 ALISON HALL
PHONE: 302-738-8437
OFFICE HOURS: BY APPOINTMENT

Competency Approach:
Home Economics Teacher Education
Co-Directors:
Dr. Mary Lou Liprie
Dr. Hester R. Stewart

November 17, 1977

Mrs. Minnie Wynder, State Supervisor
of Home Economics Programs
DPI
Townsend Building
Dover, DE 19901

Dear Mrs. Wynder:

As the State of Delaware will be implementing competency-based education in the public schools in 1978, it has become evident that our college and university teacher educators will need to reassess preservice (and inservice) programs to determine revision necessary to implement competency-based education.

A federal grant has been awarded through the Education Professions Development Act for research into the development of a plan for the implementation of a competency-based program for preparing vocational home economics teachers at the University of Delaware. As ours will be the first competency-based teacher education program in the State of Delaware, hopefully this research could serve as a model for the other educational areas to examine existing programs and courses.

Since current literature reveals the worth of CBTE (PBTE) and also questions its value, we are trying to reach a consensus among professionals regarding CBTE (PBTE) to help us build a rationale for the above-mentioned plan. We believe that state supervisors of home economics, such as you, would be the best person to provide this capsule summary for us. Therefore, we are asking your cooperation in completing the enclosed questionnaire and returning it in the self-addressed envelope by December 2.

Thank you for your assistance in this effort to improve the quality of professional education that home economics teachers are receiving.

Sincerely,

Mary Lou Liprie

Mary Lou Liprie, Ph.D.
Project Director

MLL:js
Enclosures

State in which you are supervisor_____

November, 1977

A SURVEY OF THE CURRENT STATUS OF COMPETENCY-BASED HOME ECONOMICS TEACHER EDUCATION PROGRAMS

The term CBTE (PBTE) is used in this study to mean that a home economics teacher education program is competency-based if the skills to be demonstrated by the student are acquired from explicit conception of teacher roles, stated so as to make possible assessment of a student's behavior in relation to these specific competencies and made public in advance.

- - - - - - - - - -

It is realized that each vocational home economics teacher education program is unique in emphases, standards, constraints, operational guidelines and other priorities. Therefore we know there will be a variety of responses regarding programs in any given state.

DIRECTIONS: Please check and or list any appropriate information.

1. How many teacher education programs in the state in which you are supervisor prepare vocational home economics teachers?

2. Please list or attach a list of these institutions.

3. How many of these institutions have implemented CBTE in home economics?

_____total program - all courses are competency-based oriented

_____1 or more course(s) are competency-based, but not total program

_____concept or unit within a course(s) is competency-based, but not total course

_____other - please specify

4. How many of the competency-based programs have been implemented since September 1973?

5. How many of the above mentioned competency-based programs been evaluated?

6. How many of the home economics teacher education programs are in the planning stages for implementing some aspect of CBTE?

7. How many home economics teacher education programs have not become involved with CBTE?

8. On what basis or rationale did the institutions decide to implement CBTE in home economics?

_____A. state certification requirement

_____B. competency-based education is being implemented at the elementary and/or secondary level in the state

_____C. following the new CBTE movement effort to improve and upgrade education programs

_____D. other - please list or comment

Of those institutions with some aspect of CBTE in operation, how did the personnel: (check as many as appropriate)

9. identify the professional education competencies to be developed?

_____A. identified own

_____B. used or modified ones developed by The Center for Vocational Education, Ohio State University

_____C. modified ones developed by other home economics programs in the state or another state

_____D. other - please list or comment

10. identify home economics content competencies to be developed?

_____A. identified own

_____B. used state home economics curriculum to identify concepts to be taught

_____C. used Concepts and Generalization: Their Place in High School Home Economics Curriculum Development, AHEA, 1967

_____D. used Competency-Based Professional Education in Home Economics, AHEA, 1974.

_____E. other - please list or comment

11. acquire instructional materials to be used?

_____A. developed own

_____B. used ones developed by other program areas

_____C. used modules developed by The Center for Vocational Education, Ohio State University

_____D. other - please list or comment

12. prepare faculty and students for still "another" new education concept?

_____A. seminars - workshops

_____B. open meetings

_____C. no preparation

_____D. other - please list or comment

13. work with the following selected groups of people?

A. Lea's - i.e. local schools

B. Sea's - i.e. bureau of certification

C. college and/or university records office

D. other - please list or comment

14. work out the needed fiscal and physical support system?

_____A. grant monies

_____B. reallocation of resources

_____C. other - please list or comment

Additional Comments:

APPENDIX B

1. LETTER OF INVITATION TO DELAWARE VOCATIONAL TEACHER EDUCATORS

2. AGENDA FOR SEMINAR

3. FOLLOW-UP MEMORANDUM TO DELAWARE VOCATIONAL TEACHER EDUCATORS

UNIVERSITY OF DELAWARE
NEWARK, DELAWARE
19711

EPDA RESEARCH
104 ALISON HALL
PHONE: 302-738-8437
OFFICE HOURS: BY APPOINTMENT

Competency Approach:
Home Economics Teacher Education
Co-Directors:
Dr. Mary Lou Liprie
Dr. Hester R. Stewart

June 12, 1978

MEMORANDUM

TO: Vocational Teacher Educators in Delaware

FROM: Mary Lou Liprie
Home Economics Teacher Educator
College of Human Resources

As the State of Delaware will be implementing competency-based education in the public schools soon, it has become evident that college and university teacher educators will need to reassess preservice programs to determine revision necessary to implement competency-based education.

A federal grant was awarded this past year through EPDA for research into the development of a model for the feasibility of implementing a competency-based program for preparing vocational home economics teachers at the University of Delaware.

As one of the objectives was to share the findings with you, and as I believe there are possible implications for other vocational teacher education programs in the state, I am establishing a meeting time of 10-12:00 noon, Thursday, June 22, Room 103 Alison Hall, University of Delaware campus to present the results to you.

I hope you will be able to join the group for this discussion and perhaps identify ways of working together to improve the quality of our existing programs.

MLL:js

UNIVERSITY OF DELAWARE
NEWARK, DELAWARE
19711

EPDA RESEARCH
104 ALISON HALL
PHONE: 302-738-8437
OFFICE HOURS: BY APPOINTMENT

Competency Approach:
Home Economics Teacher Education
Co-Directors:
Dr. Mary Lou Liprie
Dr. Hester R. Stewart

CBTE RESEARCH REPORTING SESSION

The Development of a model for the Feasibility of Utilizing the Competency-Based Approach in Teacher Education Programs in Delaware.

Dr. Mary Lou Liprie, Project Director

June 22, 1978
10-12:00 noon
101 Alison Hall
College of Human Resources

AGENDA

10:00 Introduction and coffee

Objectives of Study

Findings of Study

11:00 Identify needs and interests of Delaware Vocational Educators in relation to CBTE

Determine the feasibility of vocational teacher educators in Delaware working together on the CBTE concept.

UNIVERSITY OF DELAWARE
NEWARK, DELAWARE
19711

EPDA RESEARCH
104 ALISON HALL
PHONE: 302-738-8437
OFFICE HOURS: BY APPOINTMENT

Competency Approach:
Home Economics Teacher Education
Co-Directors:
Dr. Mary Lou Liprie
Dr. Hester R. Stewart

June 27, 1978

MEMORANDUM

TO: Vocational Teacher Educators in Delaware

FROM: Mary Lou Liprie
Home Economics Teacher Educator
College of Human Resources

SUBJECT: Results of CBTE Reporting Session for EPDA Project, "The Development of Model for the Feasibility of Utilizing the Competency-Based Approach in Teacher Education Programs in Delaware," June 22, 1978, 10:00-Alison Hall, University of Delaware.

The purpose of this session was to report to you the findings of the research project, "The Development of a Model for the Feasibility of Utilizing the Competency-Based Approach in the Home Economics Teacher Education Program at the University of Delaware," as well as to identify needs and interests of Delaware Vocational Educators in relation to CBTE and to determine the feasibility of vocational teacher educators in Delaware working together on the CBTE concept. I appreciate the effort made by those of you in attendance, and to those of you who could not join us, the following results and recommendations were recorded:

1. In response to a survey regarding home economics CBTE programs, State Supervisors of Home Economics from thirty-three states reported 176 institutions offered vocational home economics teacher education programs of which sixty-three have implemented some form of competency based teacher education.

2. A 1977 survey of teacher education institutions by the National Center for Educational Statistics revealed that approximately half of the nation's teacher education programs have developed and adopted written statements of learning objectives and competencies. An additional 34 percent of the institutions surveyed were either developing or awaiting the approval of such competency statements. Associated with this development, teacher education department heads reported a shift in the basic unit of instruction, from the traditional course to smaller units focused on developing specific competencies and predicted that by the academic year 1978-79, competencies will be the basic unit of instruction in over fifty percent of the teacher education programs.

   Therefore, it appears reasonable that the Home Economics teacher education program at the University of Delaware could be reviewed, considering the CBTE approach.

3. Strong interest was expressed by the vocational educators present in working together on the CBTE approach in Delaware. Business Education and Agriculture Education at the University of Delaware are each beginning projects in this area. Members of the group expressed interest in visiting some of the sites where joint efforts have been successful. The question was raised if any EPDA funds might be available to make such visits. Dr. Patricia Sites, State EPDA Coordinator indicated that perhaps there might be some carry over funds from the 1977-78 EPDA Externship Program that could be applied for to be used in this way. Dr. Sites further explained that monies up to $500, could be awarded to vocational education administrators, supervisors, teachers, and teacher educators to visit and observe exemplary programs (maximum 5 days) and share information gleaned with other appropriate personnel in the state.

A concern of those present was that the emphasis of the externships awarded to members of this group be to ascertain: 1) methodology used in developing awareness and acceptance of CBTE and 2) the type delivery system developed and used for implementing CBTE. The ultimate expected outcome of these observations would be the development of a position paper on these two concepts.

The following are just some institutions where two or more of the vocational service areas have worked together in CBTE programs: you may know of others.

Temple University	Purdue University
University of Rhode Island	Wayne University
State University College at Utica/Rome	University of Michigan
Utah State University	Florida State University

Attached is an application for your use if you would be interested in making such a visit. The completed application must be returned in the attached envelope and postmarked by 5:00 July 14 with visits to be made by September 1. If there are questions Dr. Sites can be reached June 27-30 at 738-1171 and myself at 738-8437 office or 738-6739 (home) June 30-July 14.

It is anticipated that funds may be available for four to six people to make these trips. We are looking forward to a good response from the group!

The group unanimously agreed to meet in September to hear results of visits and discuss other pertinent concerns.

MLL:mm
Enclosure
cc: Dr. Sites

APPENDIX C

STATES AND TERRITORIES FROM WHICH SURVEYS WERE RECEIVED

States From Which Survey of State Supervisors of Home Economics Regarding CBTE were Received

1. Connecticut
2. Maine
3. New Hampshire
4. Rhode Island
5. Vermont
6. New York
7. Delaware
8. Maryland
9. Ohio
10. Indiana
11. Kentucky
12. Michigan
13. Illinois
14. Iowa
15. Minnesota
16. North Da'kota
17. South Dakota
18. Kansas
19. Missouri
20. Colorado
21. Montana
22. Tennessee
23. Virginia
24. Florida
25. Alabama
26. Utah
27. Nevada
28. New Mexico
29. California
30. Oregon
31. Washington
32. Alaska
33. Idaho
34. Guan
35. Virgin Islands